federal register

Thursday
November 13, 1980

Part III

Department of Transportation

Federal Aviation Administration

General Operating and Flight Rules: Proposed Issuance of Notices to Airmen for Communicating Emergency Flight Rules; Draft National Air Traffic Control Contingency Plan for Potential Strikes and Other Job Actions by Air Traffic Controllers

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 91

[Docket No. 21022; Notice No. 80-19]

General Operating and Flight Rules; Proposed Issuance of Notices to Airmen for Communicating Emergency Flight Rules

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes an amendment to up-date and clarify the general flight rules by expressly stating that FAA Notices to Airmen (NOTAMs) are an authorized means by which emergency flight rules are communicated to pilots and operators. Such a use of regulatory NOTAMs is contemplated under the FAA's "Draft National Controller Strike Contingency Plan" published elsewhere in today's Federal Register. NOTAMs have been used for many years to communicate information critical to immediate flight safety and to regulate certain aspects of flight operations as rapidly as changing conditions require. However, the existing regulatory provisions expressly authorizing the use of this effective means of immediate communication are limited to specific situations.

When the Administrator determines that emergency conditions exist that are not adequately covered by the existing rules and regulations, the FAA has the ability to announce immediately appropriate flight rules, including flight restrictions and prohibitions, that prescribe the terms and conditions under which flight operations may be conducted within the designated area during the emergency. The proposed rule would clarify the use of NOTAMs for those purposes and provide express authority for their use during a declared emergency.

DATES: Comments must be received on or before: December 29, 1980.

ADDRESSES: Send comments on the proposal in duplicate to:
Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 21022, 800 Independence Avenue, SW., Washington, DC 20591;
OR deliver comments in duplicate to:
FAA Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, DC.

Comments may be examined in the Rules Docket weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

FOR FURTHER INFORMATION CONTACT: B. Keith Potts, Airspace and Air Traffic Rules Division, Air Traffic Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426-3731.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposals. Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposals. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 21222." The postcard will be date/time stamped and returned to the commenter. All communications received before the specified closing date for comments will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this notice may be changed in the light of comments received. All comments submitted will be available for examination in the Rules Docket both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

Availability of NPRMs

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 426-8058. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11-2 which describes the application procedure.

Background

New situations occur, including emergencies, that are not always adequately addressed by existing rules. Whenever necessary, those rules are amended or new rules are adopted to meet changing circumstances. However, not all circumstances warrant a general, "permanent" rule, particularly if it would cover elusively defined or very infrequent situations, or if it would require too much generalization in the rule to be effective under the specific conditions that can actually develop. This proposed amendment would clarify the basis for prompt, direct, and responsive action that can be tailored for any type of emergency condition.

Some contingency planning for emergencies must precede the need to react to ensure preparedness with a variety of well-developed, potential actions that, in whole or in part, can be taken under the circumstances that arise. For example, in today's Federal Register, the FAA is publishing its "Draft National Controller Strike Contingency Plan." Under that plan, NOTAMs would be used for specific regulatory purposes responding to existing or developing conditions. Widespread or local emergencies, accidents, natural disasters, sabotage, equipment failures, and other similar events can trigger the need for timely reaction locally, regionally, or nationally. Even in those cases not covered by extensive contingency planning, the proposed rule would recognize the FAA's need and ability to communicate immediately the necessary emergency information and flight rules that provide the requisite levels of safe and efficient use of the navigable airspace by aircraft without undue burdens to airspace users.

For many years the FAA has fulfilled its need to communicate immediately to pilots and operators information critical to flight safety or of regulatory significance by issuing Notices to Airmen (NOTAMs) through the National Flight Data Center. Those telegraphic messages receive nationwide, all-circuit dissemination within the FAA communications system to its facilities and personnel and are thereby available to persons using the National Airspace System. Under § 91.5 of the Federal Aviation Regulations, pilots are required, before beginning a flight, to familiarize themselves with all available information concerning that flight. An important element of that preflight action is the available Notices to Airmen. In addition to preflight briefings, NOTAM information may be obtained through two-way radio communications with air traffic control and flight service stations.

In that regard, the NOTAM is an invaluable means of providing pilots and operators the current, specific information. It also provides the means of communicating matters of regulatory significance which prescribe the conduct of flight operations when prior rulemaking through notice and public procedure in the **Federal Register** is not only impracticable but unresponsive to fast developing and changing conditions not adequately covered by existing rules. When necessary, it provides the pilot with actual knowledge of the changes in the rules and regulations affecting that operation.

Several existing regulations expressly authorize the use of NOTAMs as the means of communicating information under their provisions. Those regulations deal with specific situations in which NOTAMs are used whenever necessary. However, there is no express regulatory authorization for the more general use of NOTAM for other emergency situations even though the Federal Aviation Act of 1958, as amended, authorizes and directs the Administrator to respond to all matters affecting flight safety and contemplates exercise of that authority to effect timely and necessary results. The emergency conditions to which response is needed vary so greatly and dictate varying types of responses. Thus, it is not possible to anticipate them and provide specific regulatory provisions to cover each before the need arises. An express regulatory basis for timely and appropriate action in response to emergency situations is needed to clarify FAA's responsibility and authority to augment or supplant the existing flight rules. This proposed amendment fulfills that need by providing in the rules notice to pilots and operators that whenever found necessary, the Administrator, or the Director, Air Traffic Service, issues appropriate information and rules by means of a NOTAM.

The Proposed Amendment

Accordingly, the Federal Aviation Administration proposes to amend Subpart B of Part 91 of the Federal Aviation Regulations (14 CFR Part 91) by adding a new § 91.100 to read as follows:

§ 91.100 Emergency flight rules.

(a) This section prescribes a process for issuing emergency air traffic rules and designates that Service head authorized to act for the Administrator under this section.

(b) Whenever the Administrator determines that an emergency condition exists, or will exist, in which normal flight operations under this subchapter cannot be conducted consistent with the required levels of safe and efficient use of the navigable airspace, the Administrator, or the Director, Air Traffic Service, issues Notices to Airmen (NOTAMs). Those Notices to Airmen prescribe appropriate rules and regulations to govern flight operations (including flight restrictions) and designate the airspace areas within which the rules and regulations apply.

(c) When a Notice to Airmen (NOTAM) has been issued under this section, no person may operate an aircraft, or other device governed by the Notice to Airmen, within the designated airspace area except in accordance with the authorizations, terms, and conditions prescribed in the Notice to Airmen.

(Secs. 307, 313(a), 601, 602, 603, 902, 1110, and 1202, Federal Aviation Act of 1958, as amended (49 U.S.C. §§ 1348, 1354(a), 1421, 1442, 1443, 1472, 1510, and 1522); Sec. 6(c), Department of Transportation Act (49 U.S.C. § 1655(c)); and 14 CFR 11.45.)

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since this regulatory action involves agency procedure for communicating regulatory decisions when an emergency is found to exist, the anticipated impact is so minimal that it does not warrant preparation of a regulatory evaluation.

Issued in Washington, DC, on November 7, 1980.

R. J. Van Vuren,

Director, Air Traffic Service.

[FR Doc. 80-35305 Filed 11-12-80; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Draft National Air Traffic Control Contingency Plan for Potential Strikes and Other Job Action By Air Traffic Controllers

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of contingency plan; request for comments.

SUMMARY: Recent statements published by the Professional Air Traffic Controllers Organization (PATCO), the air traffic controller union, indicates that a nationwide strike and other job action is being contemplated and is a very distinct possibility in 1981. While the FAA will continue to do everything it can to preclude those actions, satisfaction of some of the PATCO demands would require the enactment of new legislation, by the Congress and the president. Consequently, in light of the recognized effect a strike or job acitn would have on the national air transportation and air traffic control systems, it is essential that the FAA has and is prepared to implement a thorough contingency plan to respond to the conditions that can quickly develop. The plan will help to minimize the adverse effects on the national and international air transportation system if a local, regional, or national strike or other job action by the air traffic controllers occurs.

The draft National Controller Strike Contingency Plan is intended to ensure the FAA's ability to provide a safe and orderly operation of Air traffic control system with the available, qualified manpower. It will be implemented if a national strike occurs or if any job action is expected to become sufficiently widespread to reduce the system's ability to sustain operations above those that can be achieved by implementing the contingency plan. The basic objective of the plan is to maximize the number of aircraft that can be accommodated with the reduced work force. That can be achieved, in part, by reducing the number of controller actions in handling air traffic consistent with ensuring flight safety. The plan uses rigid flight schedules, routes, and altitudes and the reduction or elimination of some services not directly affecting the flight safety provided under the air traffic contol system. Since the plan involves both terminal and enroute capacities for civil and military operations, the plan requires the use of priorities among aircraft movements, including operations under visual flight rules (VFR) as well as instrument flight rules (IFR). A decision to implement the contingency plan would be announced at least 12 hours before becoming effective on midnight Eastern time. Specific implementing actions would be issued at least four hours in advance and disseminated to the public as widely as possible. Appropriate regulatory actions will be taken to implement actions under the plan having regulatory significance.

DATES: Comments on the draft plan must be received on or before: December 15, 1980.

ADDRESSES: Send comments on the draft plan in duplicate to: Federal Aviation Administration, Air Traffic Service, ATC Automation Division (AAT–500), 800 Independence Avenue SW., Washington,DC 20591;

Or deliver comments in duplicate to: FAA Air Traffic Service, Room 429A, 800 Independence Avenue SW., Washington, DC.

Comments may be examined in the Room 429A weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

FOR FURTHER INFORMATION CONTACT: Mr. Robert H. Throne, ATC Automation Division (AAT–500), Air Traffic Service, Federal Aviation Administration, 800 Independence Ave. SW., Washington, DC 20591; telephone (202) 426–8548.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to submit their written data, views, or arguments on the draft contingency plan as they may desire. Comments that provide the factual basis supporting the matters presented in the comments are particularly helpful in developing reasoned decisions on the issues. Communications should identify the submission as being in response to this notice. All communications received before the specified closing date for comments will be considered before taking action on the proposal. The proposals contained in this notice may be changed in the light of comments received. ALL comments submitted will be available for examination in the ATC Automation Division office both before and after the closing date for comments.

Synopsis of the FAA's National Controller Strike Contingency Plan

I. Purpose

Job actions by the air traffic control system's controller work force have occurred in the past. Those actions have varied from local facility actions by controllers to nationwide actions, and from so-called "by the book" operational slowdowns to full walkouts.

All such actions are extremely costly to system users, to those who depend on aviation, and to the public as a whole. The cost of such actions far exceed mere dollar figures. They cover an almost unlimited scope, including wasted fuel, disrupted supplies to business, consumers, and hospitals, inconvenience to individuals dependent upon air transportation for business, family emergencies, and vacations and can impact on military efficiency and preparedness. These actions can, if carried out on a widespread basis and for prolonged periods, cause business down-turns and failures and subsequent job losses to thousands. The costs of such controller actions are not always recoverable when the controllers return to work, but can represent permanent losses to the country.

Recent publications by the Professional Air Traffic Controllers Organization (PATCO), the air traffic controller union, indicates that a nationwide job action is being contemplated and is a very distinct possibility in 1981. While the Federal Aviation Administration (FAA) will do everything it can to preclude such an action, the demands of the controllers, for wages in excess of the Federal wage scale, exceed the FAA's authority to negotiate or approve. Indeed, demands like those require combined Congressional and Presidential action in the form of the passage of new, special legislation. Consequently, it is incumbent upon the FAA to develop and to be prepared to implement a contingency plan to minimize the impact on the nation if a national job action by the air traffic controllers occurs.

The FAA draft National Controllers Strike Contingency Plan consists of three phases:

Phase 1 contains those preparatory administrative actions by the FAA's regional offices and facilities that must be completed before activation of the plan and implementing activities. Accordingly, Phase 1 does not directly affect the public and is not included in this notice.

Phase 2 commences when the Administrator determines that the contingency plan should be activated and sets the time for its implementation. It includes those activities which must be accomplished during the period between the decision to activate the plan and its actual implementation.

Phase 3 consists of those activities taken by each affected FAA element while the contingency plan is in effect, including any actions necessary for transition to reinstatement of full air traffic control capability and termination contingency plan operations.

II. Objectives

The FAA National Controller Strike Contingency Plan is intended to provide a safe and orderly operation of the air traffic control system with the remaining available manpower resources in the event of a national job action by air traffic controllers. The plan is not intended for use in response to sporadic or limited job actions by controllers. It will be implemented only if job actions are, or are expected to become, widespread enough to reduce the system's capabilities and capacities to levels below those which can be sustained by implementation of the plan.

The plan is geared to provide service for critical activities, to provide service to the extent possible for needs which cannot be reasonably met through alternative means, and to provide service to as many other aviation needs as can be accommodated. It will be carried out with a work force made up only of supervisors, other qualified (nonbargaining unit) employees, and controllers who do not participate in the strike or other job action.

III. Concept

The basic concept of the contingency plan is to maximize the number of aircraft which can be accommodated with a severely limited work force by reducing the number of controller actions required to ensure safe flight for each aircraft from takeoff to landing. This concept is achievable through the use of limited aircraft operations, rigid schedules, routes, and altitudes and the reduction or elimination of some services not affecting the safety of the ATC system users.

The ATC facility staffing throughout the country is normally predicted upon accommodating, to the extent possible, the users' requests for departure times, routes, altitudes, and additional services. That approach best meets the nation's air transportation needs by permitting cost effective and competitive business operations, efficient military activity, and flying geared to public and individual convenience. The accommodation of random user wishes does, however, result in traffic volume peaks and valleys, particularly at ATC center facilities, which vary widely and somewhat unpredictably. During peaks, many more controller activities per aircraft are needed to ensure air safety, efficiency, and convenience, thus, requiring more air traffic controllers. During periods of low traffic volume, the system capacity is not fully utilized. The contingency plan will eliminate peaks and valleys and result in a reasonably constant traffic flow consistent with available capability.

A full nationwide controller strike would reduce the qualified air traffic control work force by about 85%. The remaining work force would consist of operationally qualified supervisors and nonbargaining unit employees. It is not possible to sustain a normal level of air traffic control services with only 15% of the normal work force even with the elimination of traffic volume peaks and valleys. The service which would be available would, therefore, be provided on a predetermined priority basis intended to meet the nation's needs as best as possible.

The order of priority in general terms is as follows:

a. Air traffic movement required for national defense.

b. Medical emergency flights.

c. Long-range flights for which no reasonable alternative means of transportation exist.

d. Shorter-range flights capable of serving the most people or national needs.

Any remaining unused capacity or additional capacity resulting from less than full participation of controllers in the job action will be used, to the extent possible, to accommodate those aircraft movements not included in those four priorities.

IV. System Operation

A. IFR Flight Approval

1. *Day and Evening Shifts.* There are four basic categories of IFR flight approval under the controller strike contingency plan. They are (1) priority flights; (2) preapproved, scheduled flights; (3) approved, scheduled flights within the first hour of a shift; and (4) approved flight within the second hour of a shift. The last two priority levels are designed to use any increased capacity which will be available if some controllers report for duty.

a. *Priority 1: Priority Flights.* Priority flight approval will apply to flights that are military necessity, medical emergency flights, Presidential flights, flights transporting critical FAA employees, etc. Flight plans for these flights will be filed in a normal manner; however, they will contain a predetermined indicator of the flight's priority status. Clearance requests and issuances will occur in the normal manner. Flights falling within this category will be accommodated before flights in the lower categories.

b. *Priority 2: Preapproved Flights.* A daily national flight schedule reflecting facility capacity assuming only supervisory staffing, will be published as soon as they are completed. That schedule, based on long-range (500 miles or more), nonstop flight service between city pairs being served as of February 11–12, 1980, and short-range flight service added to bring facility workload up to capacity, will cover between 16 and 18 hours of the 24-hor day. The same schedule will be applicable each day the contingency plan is in effect.

The national flight schedule is being developed to assure traffic balance at all operating positions at FAA air traffic control facilities. That balance increases significantly the number of aircraft which can be accommodated by the available 15% (base level) of the work force. Scheduled flights may be canceled on a daily basis or on a permanent basis by the user. Flights cannot be added to the schedule or adjusted to different departure times. Unused capacity created by cancellations of scheduled flight will become additional second hour approval capacity.

Flight plans will be stored at air route traffic control centers (ARTCCS) for all priority 2 flights and flight plan filing will not be required. IFR clearances will be requested and issued in a normal manner. Priority 2 flights will be designated as long range or short range. In unusual situations (such as severe weather, poor runway conditions, unexpected lack of supervisory personnel available for duty, or either minor or major equipment outages which reduce facility capacity below the planned levels), flights will be canceled to reduce service to existing capacity. Short-range flights will be canceled in lieu of long-range flights to achieve that result whenever possible.

c. *Priority 3: First Hour Approval Flights.* This priority level is established to make use of a limited amount of additional capacity which can be quickly identified after the start of the day and evening shifts. The flights which may be approved during the first hour of the day and evening shifts will be identified in the same manner as those on the priority 2 national schedule. Unlike the priority 2 flights, however, flight approval will not be given until some time during the first hour of the shift during which the flight is to be conducted.

Approval for the first hour flights will be called to the user as soon as possible after the work force reports on duty. No IFR flight plan will be filed by the user; however, the user is requested to provide the type equipment to be used on the flight when the approval call is received. IFR clearances will be requested and issued in a normal manner. The first hour approvals will be made by the flow control position in the

air route traffic control center (ARTCC) in which the departure airport is located. Adjustments to first hour flights may be permitted after the contingency plan has been in effect for several days.

d. *Priority 4: Second Hour Approval Flights.* This priority level is established to make as much use as possible of the controllers who report for duty on the day and evening shifts. Flight plans will be accepted from all users; however, when the demand exceeds capabilities of the on-duty work force, flight plans will be approved on a first-come, first-served basis consistent with available facility capability. Flight plans for the day shift must be filed between 0000 and 0800 local time and flight plans for the evening shift must be filed between 0800 and 1600 local time. IFR clearance will be requested and issued in a normal manner; however, operators should be prepared to state their assigned flight approval number, if requested.

2. *Mid Shift.* The mid-shift capacity will be greatly reduced due to minimum staffing at each facility. Priorities 1 and 2 remain in effect; however, there will be very few priority 2 flights scheduled. No priority 3 or 4 flights will be approved. The existing capacity of the mid-shift will be devoted to aircraft relocation for maintenance and to accommodate required military flights which were deferred during the day and evening shifts. Flight plan approval for relocation flights will be from the Central Flow Control Facility for long-range flights and from the ARTCC flow control position for short-range flights.

B. System Restrictions

1. Routes, altitudes, and departure times for each IFR flight will be determined before the flight is approved. The primary consideration will be the maintenance of an even level of workload at each ATC operational position. Even if an airport tower might permit more operations, that capacity may not be fully utilized because of restrictions in the ARTCC.

2. Long-range flights (500 miles or more) will operate between FL 260 and FL 370. Deviations will be considered only in the case of severe weather, aircraft capabilities, or to accommodate Priority 1 flights.

3. Short-range flights will operate at and below FL 230.

*4. VFR flight in terminal control areas (TCAs) will be restricted to departures only.

*5. VFR traffic, except for departures, will be prohibited or restricted at some major airports.

6. Some control towers may be temporarily closed.

7. Some portions of airspace will be delegated to military control facilities in order to reduce the impact to the national defense needs.

*These restrictions may be lifted at some point as experience/additional staffing permits.

C. Operational Methodology

1. Long-range flights will be assigned predetermined routes and altitudes. One route and two altitudes have been established for flight from one city to another. Aircraft departing on the same route will be separated by a minimum of 4 minutes at departure. Once the aircraft have reached assigned altitudes, a minimum of 20 miles in-trail separation will be established between aircraft on the same route at the same altitude. That separation may be decreased to the normal five-mile separation in the case of severe weather; however, it must be reestablished within 50 miles after leaving those conditions. That separation will permit the use of the DME separation in lieu of radar separation in the event of equipment impairment.

2. Short-range flights will be assigned routes and altitudes which are most consistent with the traffic flows and ARTCC sectorization established to support long-range flights. Short-range flights will not be cleared to operate above FL 230.

3. The traffic balance established by preapproved routes, altitudes, and takeoff times will be disrupted unless takeoff times are adhered to. While some deviation can, of course, be tolerated, extensive deviations cannot. The departure airport tower personnel cannot assess the impact at the arrival airport. Therefore, except in the case of air traffic control delays in getting to takeoff position, flights not airborne within 10 minutes of their approved takeoff time will be considered canceled for the day. In the case of unusual weather or airport conditions, the Central Flow Control Facility may extend the cancellation time for a specific airport until the condition is no longer considered a factor.

4. The entire plan concept is based on not holding airborne operations. Therefore, whenever two or more aircraft must hold simultaneously, the ARTCC flow control position must be notified. That information must be immediately coordinated with the Central Flow Control Facility so that appropriate action can be taken. If extensive holding is anticipated, the same coordination is required.

V. Plan Implementation

A. The decision to activate the contingency plan will be made at least 24 hours before the plan goes into effect. Users will be notified via direct calls or the news media at least 12 hours in advance of the implementation. Appropriate NOTAMs will be issued at least 4 hours before implementation. The implementation information will be as widely disseminated to the public as possible.

B. Flight schedules and other necessary information will be provided to all users on the schedules at least 48 hours before the implementation.

(c) The plan will be implemented at midnight Eastern time. Flights, other than international arrivals and necessary military operations requesting IFR clearances, will be disapproved the evening before the plan is placed into effect unless the flight can be completed before 11 p.m. local time at the arrival airport.

D. No first or second hour (priority 3 and 4) flights will be approved the first day the plan is in effect. That action will permit an assessment of the workload involved in priority 1 and 2 flights before approval of lower priority flights.

E. Aircraft relocation flight plans may be filed the evening prior to the plan's implementation.

VI. Plan Termination

A. Termination of the contingency plan operation will be announced at least 48 hours in advance. The plan will be terminated as soon as the level of operation that can be accommodated by the available work force exceeds that achieved under the plan.

B. There is a possibility of a limited or phased termination of the plan at specific ARTCCs not significantly impacted by the strike. Should that occur, those facilities excluded from the plan would still be required to adhere to the plan with respect to flights entering ARTCCs still operating under the plan. No locations will be excluded from the plan during the first 3 days after the plan's implementation.

Availability of National, Daily Flight Schedules And Certain Appendixes To the Contingency Plan

As indicated in the previous discussion, part of FAA's draft Air Traffic Control (ATC) Contingency Plan involves a national, daily schedule for flights between over 100 airports matched in "city pairs" for air transportation service. The schedule is based on the identified base level of available ATC work force at the terminal and, particularly, the enroute

facilities (supervisory staffing of ATC positions); the long range (500 miles or more) nonstop flight service between city pairs being served as of February 11–12, 1980; and short range (less than 500 miles) flight operations necessary to fill the remaining ATC facilities capacities.

Increases in the number of operations between city pairs, or new city pairs added, since February 12, 1980, will not be accomodated under the schedule in the contingency plan. In determining the level of service that the system can accommodate under the exigencies of controller action, the FAA is exercising its authority to provide for the safe and efficient use of the nagivable airspace under § 307 of the Federal Aviation Act of 1958. The allocation of which of the various operators will be authorized to provide service between city pairs under the schedule is a more complex and difficult matter. It could be handled on a first-come, first-served basis which would be cumbersome, chaotic, and not necessarily equitable or some other mechanism must be employed to achieve the necessary results. Any comments and suggestions on this important matter are specifically invited, including use of the operator schedules as they existed on February 12, 1980, or any other reasonable basis. It should be noted that if necessary § 1005 of the Federal Aviation Act of 1958, as amended, authorizes the Administrator to take the necessary emergency actions to provide the levels of safety in air commerce and efficient use of the navigable airspace.

The development of the schedule to date reflects the designation of daily takeoff and landing times for authorized long-range flights between specific city pairs. It also contains the daily takeoff and landing times which are available for short range flights. By January 15, 1981, the specific short-range city pairs will be designated in the schedule. The "first-hour approval flights" will also be identified by that date. The completed schedule, including, if possible, the identification of operators and flight number for each scheduled flight, will be available by February 9, 1981.

Because of the complexities and interrelationships among the terminal and enroute ATC facilities, the schedule is essential to maximizing use of existing capacity and ensuring traffic balance at all ATC operating positions at those facilities without interjecting undue dalays or derogating flight safety. The availability of additional, qualified ATC personnel above the base level can be reflected in increased capacity in the system and more flight operations under the plan.

In addition, the contingency plan includes numerous appendixes, some of which involve national security matters (which cannot be made public) or matters of limited public interest. Due to the large number of pages in the schedules and appendixes and the limited number of persons who would be interested in the detailed schedules in their incomplete form or in most of the appendixes, the expense of publishing them in the Federal Register would not be cost-effective. However, any person interested may request a copy of the national, daily schedules for one or more specific airports or certain, unrestricted, appendixes by contacting the person identified above under the caption For Further Information Contact.

Regulatory Actions

If it becomes necessary to implement the contingency plan, appropriate regulatory actions will be taken to complement the operational and administrative aspects of the plan. A notice of proposed rulemaking proposing adoption of a general flight rule is being published elsewhere in today's Federal Register. If adopted, that rule will expressly recognize the use of regulatory Notices to Airmen to communicate information critical to immediate flight safety or regulatory significance. That rule will clarify the rules to provide a means for prompt action as conditions dictate under the contingency plan, as well as other situations when the Administrator determines that emergency conditions require augmenting or supplanting the existing rules and regulations to ensure the safe and efficient use of the navigable airspace by aircraft.

The Draft National Controller Strike Contingency Plan

Accordingly, the Federal Aviation Administration proposes to adopt and implement, if necessary, the following contingency plan.

Issued in Washington, DC, on November 7, 1980.

R. J. Van Vuren,
Director, Air Traffic Service.

Department of Transportation, Federal Aviation Administration

Draft National Controller Strike Contingency Plan

Phase I

* * * * *

Definitions

Acceptance Rates. Hourly arrival/departure capacities of airport traffic control towers and TRACONS/RAPCONS based upon available staffing and airport constraints.

Aircraft Relocation. Flights between long-range airports during the hours of 1:00 a.m. to 7:00 a.m. local time for the purpose of aircraft maintenance.

Approval Number. A number assigned to a flight plan indicating approval by the center flow controller for second hour flights.

EXAMPLE: N123 flight plan assigned SH25 in remarks indicates November 123 is the twenty-fifth flight approved during the second hour of the shift.

Assistant Controllers. Employees designated to perform assistant controller duties.

Capacity. Maximum number of aircraft that can safely be handled by a facility in a given time period.

City Pairs. Two airports that have scheduled nonstop service between them.

Contingency Charts. Locally prepared charts depicting the contingency routes.

Air Traffic Operations Status NOTAM Code. A code developed in Headquarters to reduce NOTAM dissemination workload. The primary use of this code will be to encode/decode air traffic services that may not be available and/or facility closures during Phase III of this plan.

Contingency Routes. An airway structure throughout the country using one-way airways when possible and, in most cases, built-in altitude separation at airway crossing points.

Controllers. For the purpose of this plan, team supervisors and other operationally current employees.

Departure Time. Takeoff time.

Facility Status Report. A reporting system established to enable Central Flow Control to keep abreast of the capability of the air traffic system.

First-Hour Approval Flights. Round trip, short-range flights that are scheduled prior to implementation of this plan and approved on a daily basis during the first hour of each shift.

Long-Range Airports. An airport that has a control tower operated by the FAA and had nonstop air carrier and air taxi service identified in the January 15, 1980, Official Airline Guide that met the long-range criteria.

Long-Range Flights. Long-range flights between two long-range airports. These flights are divided into two categories;

LR–I are flights where the distance is 500 nautical miles or more and transits three or more ARTCC areas.

LR–II are flights where the distance is 500 nautical miles or more and transits no more than two ARTCC areas.

Long-Range Flight Schedule. Flights between long-range airports that are

scheduled prior to implementation of this plan and are preapproved to operate daily for the duration of the contingency plan.

Long-Range International Flight Schedule. Long-range flights between long-range airports and airports outside the conterminous United States that are scheduled prior to implementation of this plan and are preapproved to operate daily for the duration of the contingency plan.

Non-Long-Range Airports. All airports not identified as long-range airports.

Phase I. Prepare for implementing Phases II and III.

Phase II. Transition from present-day traffic to the contingency traffic level.

Phase III. Operational mode.

Prescheduled Flights. Flights between long and/or short-range airports that are scheduled prior to implementation of this plan and are preapproved to operate daily for the duration of the contingency plan.

Round Trip. Two-way nonstop service between city pairs.

Second-Hour Approval Flights. Short-range flights which are requested on a daily basis after implementation of the plan and are normally approved during the second hour of the day and evening shifts, traffic permitting.

Shifts. Midnight to 8:00 a.m.; 8:00 a.m. to 4:00 p.m.; 4:00 p.m. to midnight.

Short-Range Airport. An airport that has air carrier/air taxi service that does not meet the long-range criteria.

Short-Range Flights (S–R Flights). Nonstop flights between long and/or short-range airports where the straight line distance is less than 500 nautical miles and transgresses no more than two centers' areas.

Slot Times. Predetermined landing/takeoff times based on airport acceptance rates that are used while scheduling flights at long/short-range airports.

Terminal Facility. Airport Traffic Control Tower, RAPCON, TRACON, and CIFRR.

Trip Code Number. A number which identifies in numerical order the departures and arrivals between paired airports.

Tower En Route Flights. Flights between and ramaining within two approach controls' airspace where letters'of agreement define procedures for their handling.

International Flights. A flight entering, exiting, or overflying the conterminous United States.

* * * * *

(The remainder of Phase I deals with the development of the contingency plan and thus is not included for purposes of this notice.)

Phase II

Chapter 7. Phase II—Headquarters

31. *AOA–1 Responsibilities.*

a. The decision to commence Phase III is the responsibility of the Administrator. Once the decision is made, Phase II is automatically implemented.

b. Notify the Associate Administrators; Offices of Aviation Medicine, Chief Counsel, Civil Rights, and Public Affairs; Regional Directors; and appropriate military authorities of the date/time Phase III will be implemented.

32. *Associate Administrator Responsibilities.* When notified by the Administrator, advise staffs and service directors to commence Phase II and the date/time Phase III will be implemented.

33. *Service Directors' Responsibilities.* When notified by the Administrator or Associate Administrator, advise staffs and divisions to commence Phase II and the date/time Phase III will be implemented.

34. *Air Traffic Division and Staff Chiefs' Responsibilities.*

a. Within 1 hour of notification by AAT–1, advise division and staff personnel to commence Phase II and the time to commence Phase III.

b. Establish appropriate work schedules and notify subordinates.

c. Assess Phase III personnel requirements and advise AAT–10 of surplus people or additional personnel required not later than 20 hours prior to commencing Phase III.

d. Forward names of staff specialists with data systems specialist (DSS) experience within the past 6 months to AAT–500 not later than 20 hours prior to commencing Phase III.

e. Forward completed NOTAMs/GENOTs to AAT–400 18 hours prior to commencing Phase III.

35. *AAT–10 Responsibilities.*

a. Assess regional manpower requirements.

b. Assess Headquarters manpower requirements and available personnel.

c. Assign and take action to relocate Headquarters surplus personnel to meet Phase III requirements.

d. Coordinate with AFO–1 for personnel relocation assistance using FAA aircraft.

e. Complete actions in items a through d above not later than 12 hours prior to commencement of Phase III.

Note.—AAT–20 and AAT–500 will manage their own personnel resources and will not identify surpluses but will require AAT–10 assistance for personnel relocation.

f. Notify affected divisions of flight arrangements for personnel transportation as soon as possible.

g. Notify regions of additional resources being flown to facilities and request transportation and accommodations for those personnel no later than 6 hours prior to the commencement of Phase III.

36. *AAT–400 Responsibilities.*

a. Collect, coordinate, and disseminate all Headquarters Air Traffic Service NOTAMs/GENOTs.

b. Transmit implementation NOTAMs/GENOTs and other messages as required. (See Appendix 36 for NOTAM/GENOT and special messages.)

c. Ensure that Central Flow Control:

(1) Has additional personnel assigned and assigns duties and shifts as appropriate.

(2) Has a current contingency route chart available.

d. Direct ARO to discontinue service.

e. Coordinate with the appropriate military authority to ensure military representation will be available in the Central Flow Control Facility 4 hours before Phase III commences.

f. Notify the users of the date and time of Phase III commencement by:

(1) NOTAM.

(2) ATCSSC advisory.

(3) Telephone calls to users not subscribing to ARINC.

g. Ensure all actions in paragraph 36 are completed not later than 8 hours prior to commencement of Phase III.

37. *Central Flow Control Responsibilities.* When notified by CARF, notify the facilities of any preapproved military Priority 1A and 1B flights (see Appendix 41) that will be operating in their areas during Phase III. ALL OTHERS THEY HAD PREVIOUSLY APPROVED ARE CANCELED.

38. *CARF Responsibilities.*

a. Coordinate previously approved military operations scheduled for the first week of Phase III with the originator, establish their priorities, and:

(1) Cancel preapproved missions that are not Priority 1A or 1B.

(2) Forward Priority 1A and 1B flights to Central Flow Control at least 4 hours prior to the commencement of Phase III. (See Appendix 41.)

b. Do not approve any other flights unless approved by Central Flow Control.

39. *AAT–500 Responsibilities.*

a. Primary office for providing assistance and personnel support for ATC automated facilities.

b. Direct AAT–550 to commence Phase II activity.

c. *Automation Staffing Assistance.* Regions will forward facility data systems staffing assistance requests, if

any, to Headquarters 15 hours before Phase III commencement.

(1) Identify Headquarters personnel provide data systems support at ARTCCs and terminals using the following resources:

(a) AAT–520.

(b) AAT–530.

(c) AAT–550.

(d) List provided by AAT–10 of other specialists with recent data systems experience (within past 6 months).

(2) Request assistance from AAT–10 for relocation transportation not later than 13 hours before the commencement of Phase III.

40. *AFO–1 Responsibilities.*

a. Establish a command center staffed for 24 hours of operation until Phase III is terminated.

b. Direct operational elements to provide movement data reports on FAA aircraft locations nationwide.

c. Support FAA personnel and equipment relocations as requested by ATT–10 with AFO flight crews and aircraft. Provide AAT–10 all flight schedules.

d. Issue termination notice on flight checks except for support of accidents/incidents until plan termination.

e. Complete actions a through d not later than 8 hours prior to commencement of Phase III.

41. *AEE–1 Responsibilities.* Forward noise abatement/curfew NOTAM/GENOT to AAT–400 for transmission not later than 12 hours prior to commencement of Phase III.

42. *ACS–1 Responsibilities.*

a. Establish a command center staffed for 24 hours of operation until Phase III is terminated.

b. Coordinate with region and Headquarters key elements and provide support where required.

43. *APA–1 Responsibilities.* Release preprepared press releases and coordinate with regions and Headquarters elements as required not later than 16 hours prior to commencement of Phase III.

Chapter 8. Phase II–Regions

46. *Regional Directors' Responsibilities.* When notified by the Administrator, advise staffs and divisions to commence Phase II and the date/time Phase III is to commence.

47. *Divisions' and Staffs' Responsibilities.* When notified by the Regional Director, advise division and staff personnel and all facilities to commence Phase II and the date/time Phase III is to commence.

48. *Air Traffic Division Responsibilities.*

a. *Personnel Resource Management.*

(1) Tabulate region and facility resources and requirements by job titles.

(2) Assign and initiate action to relocate surplus personnel to meet Phase III requirements.

(3) Forward personnel staffing shortages to AAT–10, including job titles and qualifications, at least 15 hours prior to commencement of Phase III. (Shortages are those required to operate the plan.)

(4) Give the highest priority to ARTCC flow controllers and terminal positions identified in Appendices 7 through 12. (ASO–500: See Appendix 10 for additional requirements.)

Note 1.—Evaluation Branches shall be held in reserve until Phase III completion to support accident/incident requirements. (See Appendix 38.)

Note 2.—Regional automation personnel shall be held in reserve until Phase III completion to support field automation functional requirements. (See b below.)

(5) Advise facilities as soon as possible which shortages will or will not be filled.

b. *ATC Automation Support.* Each regional automation branch/staff shall evaluate each automated facility's ability to provide and maintain automated ATC operational support. Assign surplus qualified personnel from field sites or qualified regional office personnel to facilities with automation personnel shortages. Each region shall notify Headquarters, AAT–500, of remaining data systems staffing needs within its region not later than 15 hours prior to the commencement of Phase III.

c. *User Notification.* Ensure that all appropriate NOTAMs are issued at least 6 hours prior to Phase III commencement.

d. *Security.* See Appendix 40.

e. *Terminal Facility Hours of Operations.* After completion of terminal staffing assessment, coordinate with facility chiefs to determine facility hours of operation if lack of staffing requires shorter hours.

f. *Status Report.* Provide AAT–1 with a brief overview of regional and facility status and readiness at least 2 hours prior to Phase III commissioning.

49. *Flight Standards Responsibilities.* Support FAA personnel and equipment relocations as requested by AFO–1 with flight crews and aircraft.

50. *Public Affairs Responsibilities.* Release preprepared press releases and provide public affairs support to field facilities.

Note.—Field facilities have been directed to refer all public affairs inquiries to regional public affairs office.

Chapter 9. Phase II—ARTCC

55. *Facility Chief Responsibilities.* Cease any activity that would degrade the facility's ability to support Phase III operational requirements. Initiate action to recall all supervisors and staff members on leave or official business.

a. *Initial Facility Status Report.* Assess the center's capability to support the long- and short-range traffic. This assessment shall include:

(1) Staffing. Advise the region if the available nonbargaining unit employee contingency staffing is more or less than the minimum required to fill the planned assistant chief, controller, assistant controller, flow controller, and automation support positions. Include the number of people and positional data, i.e., short two data systems specialists, one extra controller (team supervisor), etc. (See Appendices 10, 11, and 12.) Assign nonbargaining unit employees to the work schedules developed in Phase I and issue schedules.

(2) Operational Equipment.

(3) Automation Capabilities.

Note.—Upon completion of this assessment, forward the initial facility status report to the regional Air Traffic Division not later than 18 hours prior to commencement of Phase III.

b. *Military Coordination.*

(1) Verify that the contingency letters of agreement with the military can be implemented during Phase III and established an effective time.

(2) Coordinate the release of airspace with the military and ensure that they are aware that the airspace will not be released until Phase III commences.

(3) Apprise the region and request the issuance of appropriate NOTAMs at least 8 hours prior to the commencement of Phase III.

c. *Prepared Materials.* Ensure that all materials prepared during Phase I are available for distribution to appropriate positions within 15 minutes AFTER PHASE III commences. It is important that these prepared materials are safeguarded until AFTER the commencement of Phase III. The materials include:

(1) SOP briefing packages.

(2) Contingency route structure charts.

(3) Flight data-crib sheets.

(4) Contingency flight schedules.

(5) Restoration priority listings.

(6) First hour flight plans.

(7) Phase III work schedules.

(8) Appropriate NOTAMs/GENOTs.

(9) Contingency letters of agreement.

(10) Telephone listings and contingency labels/dial code charts.

(11) Facility flight plan handling procedures.

(12) Contingency bulk store printouts.
(13) ATC service level NOTAM code.
(14) City pair route and altitude listings.

d. *Chart Changes.* Charts that are current at the time of Phase II commencement shall be used until notified by GENOT action. Ensure that charts are marked to plainly depict airspace delegated to military organizations as well as any other changes. These charts include methods of coordination.

e. *Operational Equipment and Communications.*

(1) Coordinate with Airway Facilities and implement the restoration priorities developed in Phase I.

(2) Check the equipment and communications that will be used in Phase III and ensure operational readiness.

f. *Security.* (See Appendix 40.)

g. *Public Affairs.* Refer all media inquiries to regional Public Affairs.

56. *Assistant Chief Responsibilities.*

a. Direct supervisors to approve all departure clearances commencing 7 hours prior to Phase III commencement. Approval will be based on the flight's ability to be completed 1 hour prior to Phase III commencement.

Note.—In the case of flights which cannot be approved, direct the tower to advise the aircraft that an IFR clearance cannot be issued due to the pending contingency plan implementation.

b. At least 1 hour prior to commencing Phase III, direct the data systems officer:

(1) To shut off normal bulk store.

(2) At what time the normal computer operation can be interrupted to bring up the contingency disk.

(3) When to turn on the contingency bulk.

c. Direct a transition to contingency plan sector configuration starting 30 minutes before Phase III is to commence.

57. *Flow Controller Responsibilities.*

a. Begin a periodic review of all arrivals 2 hours prior to Phase III commencement to ensure that all arrivals will be on the ground before Phase III starts.

b. Coordinate action to divert aircraft which will not arrive before Phase III commencement to airports which can be reached before that time. This action need not be taken if the sector manning will be adequate to safely accommodate the late arrival.

58. *DSO Responsibilities.*

a. Audit local patches and contingency bulk store to ensure the integrity of any automated system that will be used in Phase III.

b. Ensure that the redundant set of contingency system disks are secured as a precautionary measure.

c. Ensure that, in addition to operational responsibilities, and as directed by the assistant chief, the following are accomplished:

(1) Shut off the normal bulk store.

(2) Terminate normal system operations by shutting down the computer.

(3) Bring up the contingency disk prior to commencing contingency scheduled operations.

(4) Turn on contingency bulk.

(5) Ensure that contingency sectorization is set up properly.

(6) Ensure that contingency system is certified.

Chapter 10. Phase II—Terminal

60. *Facility Chief Responsibilities.* Cease any activity that would degrade the facility's ability to support Phase III operational requirements. Initiate action to recall all supervisors and staff members on leave or official business.

a. *Initial Facility Status Report.* Assess the terminal's capability to support the long- and short-range traffic. This assessment shall include:

(1) Staffing. Advise the region if the available nonbargaining unit employee contingency staffing is more or less than the minimum required to fill the planned supervisory, controller, assistant controller, or automation support positions. Include the number of people and positional data, i.e., short two data systems specialists, one extra controller (team supervisor), etc. (See Appendices 7, 8, 9, and 12.) Assign nonbargaining unit employees to the work schedules developed in Phase I and issue schedules.

(2) Operational Equipment.

(3) Automation Capabilities.

Upon completion of this assessment, forward the initial facility status report to the regional Air Traffic Division not later than 18 hours prior to commencement of Phase III. If appropriate, recommend changes to facility hours of operation.

b. *Prepared Materials.* Ensure that all materials prepared during Phase I are available for distribution to appropriate positions within 15 minutes after Phase III commences. It is important that these packages and charts are safeguarded until after commencement of Phase III. The materials may include:

(1) SOP briefing packages.
(2) Contingency gate hold procedures.
(3) Phase III work schedules.
(4) Restoration priority listings.
(5) Contingency letters of agreement.
(6) ATC service level NOTAM code.
(7) Special parking charts.
(8) Contingency taxi pattern charts.
(9) Contingency departure/arrival transition charts.
(10) Special frequency/telephone listings.
(11) Appropriate NOTAMs/GENOTs.

c. *Chart Changes.* Charts that are current at the time of Phase II commencement shall be used until notified by GENOT action. Ensure that charts are marked to plainly depict airspace delegated to military organizations as well as any other changes. These charts include methods of coordination.

d. *Operational Equipment and Communications.*

(1) Coordinate with Airway Facilities and implement the restoration priorities developed in Phase I.

(2) Check equipment and communications that will be used in Phase III and ensure operational readiness.

e. *Security.* (See Appendix 40.)

f. *Public Affairs.* Refer all media inquiries to regional Public Affairs.

61. *Terminal Supervisor Responsibilities.*

a. Terminate the approval or issuance of tower en route control IFR clearances commencing 3 hours before Phase III will become effective.

b. At automated facilities NOT interfaced with the center, ensure the flight plan is dropped from the computer for any flight the center has diverted or advised an IFR clearance cannot be issued.

c. At least 1 hour prior to Phase III, direct the data systems officer:

(1) Shut off bulk store flight plan inputs if the facility is not interfaced with the center or uses a local bulk flight plan tape for tower en route or local operations.

(2) At what time the normal computer operation can be interrupted to bring up the contingency operational system.

c. Direct a transition to contingency plan position configuration starting 30 minutes before Phase III is to commence.

62. *DSO Responsibilities.*

a. Audit local patches and contingency operational program to ensure the integrity of the automated system that will be used in Phase III.

b. Ensure the redundant copies of the contingency operational program are secured as a precautionary measure.

c. Ensure that, in addition to operational resonsibilities, and as directed by the assistant chief, the following are accomplished:

(1) Shut off bulk flight plan input, if applicable.

(2) Terminate normal system operations by shutting down the computer.

(3) Bring up the contingency operational program prior to commencing contingency scheduled operations.

(4) Ensure that contingency configuration is set up properly.

(5) Ensure that contingency system is certified.

Chapter 11. Phase II—Flight Service Station

70. *Facility Chief Responsibilities.* Cease any acitivity that would degrade your facility's ability to support Phases II and III operational requirements.

a. Review watch schedules and modify as necessary to support Phase III.

b. Recall personnel on annual leave or official business if necessary.

c. Brief all employees.

d. Ensure that all materials prepared during Phase I are available for distribution to appropriate positions within 15 minutes after Phase III commences. It is important these prepared materials are safeguarded until after the commencement of Phase III. The materials may include:

(1) Specialist briefing packages.

(2) Contingency route structure charts.

(3) Restoration priority listings.

(4) Phase III work schedules.

(5) Special NOTAMs pertinent to Phase III.

(6) Telephone listings/contingency dial codes.

(7) Facility flight plan handling procedures.

(8) ATC service level NOTAM code.

e. Chart Changes. Use charts current at the time of Phase II commencement notified by GENOT action.

f. Ensure that contingency plan NOTAMs are reviewed by all specialists.

g. Ensure that contingency plan NOTAMs are located where all pilots filing flight plans have ready access to them and that they are separated from other NOTAMs.

Chapter 12. Phase III—Headquarters

80. *AAT–1 Responsibilities.*

a. Keep appropriate offices/organizations aware of the system status.

b. Recommend changes to policy or request additional support as deemed necessary.

c. Conduct a system status ATSCON at 1400 daily.

d. Direct AAT–400 to send NOTAMs/GENOTs advising users of appropriate changes to facility status or national procedures.

81. *AAT–10 Responsibilities.* Personnel resource management: Continue to provide personnel assistance as outlined in Phase II.

82. *AAT–20 Responsibilities.* Provide accident/incident investigation support and guidance to regional offices. (See Appendix 38.)

83. *AAT–400 Responsibilities.*

a. Analyze regional and Central Flow Control Facility recommendations of changes to facility status or to national procedures included in the contingency plan.

b. Coordinate with the Central Flow Control Facility or regions to determine any potential impact on the total system.

c. Recommend a course of action to AAT–1.

d. Inform regions of AAT–1 decision and coordinate an effective time.

e. Transmit appropriate NOTAMs/GENOTs when directed by AAT–1.

f. Provide AAT–1 with a daily briefing of system performance/problems.

84. *Central Flow Control Responsibilities.*

a. Notify AAT–1 of any significant system problems as soon as possible.

b. *Daily Evaluation.* Evaluate the impact of national schedule flights on the system on a shift-by-shift basis, and record the following specific problems on facility log:

(1) Facilities affected.

(2) Time of occurrence.

(3) Immediate corrective action taken.

(4) Follow-up action necessary to prevent recurrence.

c. *System Status.*

(1) One hour after the start of each shift in each time zone, conference the appropriate ARTCCs for a long-range system status report.

Note.—The terminal facilities serving long-range airports have been instructed to be prepared to forward airport status reports to their respective ARTCC 30 minutes after the start of each shift. The ARTCCs have been instructed to wait for Central flow Control's call unless there are constraints to long-range traffic. In that case, they will notify Central Flow Control immediately. The center flow controller has the option to request that Central Flow Control use conference capabilities to reduce communication/coordination time (i.e., New York Center, CIFRR, JFK, LGA, EWR, PHL).

(2) Monitor the system to determine if there are any constraints such as equipment, weather, or personnel shortages or if there are any special aircraft movements that will reduce or are reducing the contingency's long-range airport's planned capacity. If the long-range airport's capacity will be or is being reduced, estimate the duration of time you believe the constraints will exist and take the following action(s) if necessary.

(a) confirm facilities have canceled necessary short-range traffic to relieve the impacted area before taking other actions.

(b) Selectively reroute some or all over-traffic around a center's area if the constraint is in the en route environment and the rerouting will not adversely impact another route or center's area.

(c) Assist the facilities to honor requests from the airlines for an alternate airport for flights that are AIRBORNE en route to an impacted airport which cannot accommodate the arrival within a reasonable delay time (i.e., MKE as an alternate for ORD). Do not approve alternate airport requests for flights which are not yet airborne. Instead, cancel the flights.

Note.—Once the aircraft is at his alternate airport, every effort should be made to get the aircraft back into the system.

(d) Cancel flights to the impacted airport to accommodate the revised capacity. If selective reroutes are not feasible in the en route environment, cancel long-range departures that will transit the impacted center's area and proposed departures and arrivals within the impacted center's area. (See Cancellation Method, paragraph e.) When the weather is forecast to SIGNIFICANTLY impact routes, some flights proposed to transit these routes should be canceled to reduce the demand to a level that can be safely handled unless the approval of reroutes to avoid weather impacted areas will not impact another route or center area.

Note.—If any flight must be rerouted, existing contingency routes should be used where possible. In every case, reroutes must be coordinated with all centers whose airspace is affected prior to approval.

d. *Flight Schedules.*

(1) Each airport's capacity has been predetermined. No additional arrivals or departures shall be scheduled. Schedule times shall not be changed, but flights may have to be canceled due to higher priority traffic and system constraints. This does not preclude the use of airports as alternate airports or for emergency diversions.

(2) The schedule has been developed with a "no airborne delay" philosophy; however, departure delays UP TO 10 MINUTES should be accommodated. Cancellations by field facilities may be necessary to flights that cannot meet these criteria.

Note.—Some of the contingency scheduled departure times are less than 4 minutes apart. Additionally, aircraft may depart slightly late for various airport-related reasons. Whatever the case, the facilities will ensure that a departure following a preceding departure on

the same route will have a minimum of 4 minutes separation.

(3) Delete flights identified by the user as permanent contingency plan flight cancellations from the master flight schedule; tabulate and forward via teletype to center flow controllers on a daily basis during the mid-watch.

e. *Flight Cancellation Method.*

(1) When the system's capacity is reduced below the planned capacaity, cancel traffic in excess of the revised capacity that cannot be accommodated by rerouting.

(2) To avoid an adverse impact to the user, every attempt should be made not to cancel flights that are within 30 minutes of departure time. Give ground delays to these flights if the system can accommodate them.

(3) Proper planning is essential when constraints are imposed to avoid an adverse impact both to our facilities and users. Determine a revised capacity for the impacted area or airport and estimate the duration of time the constraints will exist.

(4) When the revised capacity has been determined, add the number of flights, if any, that will be accommodated at alternate airports or through rerouting to determine the total system capacity. Keep in mind that flights already airborne will have to be absorbed in the system and may have to hold; determine the number of flights that will need to be canceled to return the system to a no airborne delay posture.

(5) Cancellation priorities:

(a) First confirm cancellation of short-range flights.

(b) Then cancel a portion of the flights from airports providing most service to the impacted airport.

(c) Then cancel flights from remaining airports as necessary.

(6) Arrival constraints: There may be circumstances when the constraints imposed on the system only affect the arrivals to an airport, i.e., airport below minimum for arrival but not departure, slippery runways affecting an aircraft's turn-off capacity, etc. When conditions such as these exist, it may be sufficient to only reduce arrivals at an impacted airport. To accomplish this, cancel proposed departures to the impacted airport.

(7) Arrival/departure constraints: When circumstances such as one runway operation or personnel shortage will affect the entire operation, cancel both the proposed flights to the impacted airport and the departures from an impacted airport.

Note.—Once a flight is canceled, it shall remain canceled until the next day even though canceling conditions change.

f. *Flight Cancellation Notification Procedures.* Notify appropriate operator and advise center flow controller to remove flight plan from computer.

g. *Air Traffic Service Priorities.*

(1) Do not approve flight operations requested by CARF except for Priority 1 aircraft. (See Appendix 41.)

(2) Ensure that all military priority 1 flights are coordinated with the military representative on duty in the Central Flow Control Facility.

(3) Notify the ARTCC serving the departure airport as soon as a priority 1 flight is approved.

h. *Long-Range Traffic.* Route, altitudes, and speeds listed in Appendix 3 will be used.

Note.—Short-range flights will be handled "in-house" between facilities. Facilities have been instructed to cancel the short-range traffic as soon as constraints warrant.

i. *Aircraft Relocation (1:00 a.m. to 7:00 a.m. local).*

(1) All relocation flight plans will be filed with the Central Flow Control Facility. The flight plan will only include the flight identification, aircraft type, point of departure, arrival point, ETE, and remarks if required.

(2) Relocation flight plans will not be accepted after 2:00 p.m. Eastern time the day before the proposed departure.

Note.—Nonroutine relocations due to equipment failure may be accepted at later times and will be accommodated if possible.

(3) Schedule the relocation flights in accordance with the below restrictions:

(a) Flights should commence and be completed between 0100 and 0700 local times.

(b) Flights should be approved in a manner which does not cause the capacity of any facility to be exceeded.

(c) A minimum of 20 minutes shall be provided between departure times for flights between identical city pairs.

(d) Long-range routes (and altitudes if possible) shall be used unless there is no long-range route established between the city pairs.

(4) Approvals of aircraft relocation flights shall be forwarded to the requester and the departure center flow controller by 9:00 p.m. Eastern time.

(a) The requester shall be given the flight identification and approved departure time.

(b) The departure center flow controller shall be given:

1. Flight identification.
2. Type aircraft.
3. Assigned departure time.
4. Assigned route including departure point and destination.
5. Remarks (if filed).

j. *CARF Responsibilities.*

(1) Coordinate with Central Flow Control prior to approving military operations and include as a minimum:

(a) Priority filed for mission/flight.

(b) Number of aircraft.

(c) Duration of time (start and end).

(d) Area(s) affected.

(2) Not approve any other flights unless approved by Central Flow Control.

(3) Coordinate with facilities and military as required.

k. *ARO Responsibilities.* ARO shall not approve any airport reservations. 85. *AAT–500 Responsibilities.* Continue to provide personnel or other required assistance to regions/facilities in order to maintain the automated air traffic system.

86. *AFO–1 Responsibilities.* Flight operations: Support the requirements of AAT–10 in the movement of personnel via FAA aircraft.

87. *ACS Responsibilities.* Continue to support regions as required.

Chapter 13. Phase III—Regions

110. *Air Traffic Division Responsibilities.*

a. *Personnel Resource Management.* Continue to provide personnel assistance as outlined in Phase II.

b. *Accident/Incident Procedures.* See Appendix 38.

c. *ATC Automation Support.* Continue to provide automation support as outlined in Phase II.

d. *Security.* See Appendix 40.

e. *Facility Operations Analysis.* Analyze regional facility operations and recommend changes in the contingency plan procedures/requirements to AAT–400 if appropriate.

f. *Nonimpacted Center(s).*

(1) Analyze facility input and determine if the procedures for a nonimpacted center(s) as described in Appendix 42 can be implemented.

(2) Notify AAT–400 of any center(s) you believe can operate with these procedures.

(3) If Headquarters approved nonimpacted center(s) operation, notify appropriate facility(s).

Chapter 14. Phase III—ARTCC Operations

110. *Facility Chief Responsibilities.*

a. *Facility Status/Recommendations.* Keep the regional Air Traffic Division apprised of facility status and problems. Make recommendations on changes to facility status or contingency plan operations if appropriate.

b. *Accident/Incident.* See Appendix 38.

c. *Security.* Ensure that the security measures and personnel security restrictions are adhered to. (See Appendix 40.)

111. *Assistant Chief Position Responsibilities.* The following position responsibilities are additional to those normally required.

a. *Preapproved Flight Evaluation.* Evaluate the impact of preapproved flights on the system, on a shift-by-shift basis, and record the following on facility log:

(1) Specific problems:

(a) Facilities/sectors affected.

(b) Time of occurrence.

(c) Immediate corrective action taken.

(d) Follow-up action necessary to prevent recurrence.

(2) Light traffic periods include:

(a) Facility/sector(s).

(b) Times.

(c) Type/amount of traffc that might be added.

(3) These problems should be reviewed daily and actions taken as necessary.

b. *Status Reporting.*

(1) Assess the center's capability to support the long-range scheduled traffic and include:

(a) Personnel resources (nonbargaining unit employees).

(b) Equipment status.

(c) Weather.

(d) An estimate of what can be anticipated during the next 8-hour shift.

(2) Thirty minutes after the start of each shift, call the long-range airports and obtain their status.

Note.—Where Central Flow Control has conference capabilities, the center may, at its option, request that Central Flow Control conference terminal facilities so these reports can be given simultaneously to reduce communications/coordination time (i.e., ZNY ARTCC, CIFRR, JFK, LGA, EWR, PHL).

(3) One hour after each shift commences, be prepared to forward ARTCC/terminal status reports to Central Flow Control.

c. *Manual Flight Data Processing.* In the event of FDP failure, direct all available personnel to assist controllers in manual flight data processing and flight data coordination. Ensure that the prepared "crib" sheets are used during the manual flight data processing.

112. *Flow Controller Position Responsibilities.* The following position responsibilities are additional to those normally required.

a. Immediately notify Central Flow Control of any constraints that will reduce or are reducing long-range planned capacity. Give the nature of the constraints and estimated duration of the problem. In addition, advise Central Flow Control whenever two or more aircraft are holding in your center's airspace or one of your terminal's airspace.

b. *Contingency Traffic Management.*

(1) Air Traffic Priorities. See Appendix 41.

(2) Contingency Separation.

(a) Departure: At least 4 minutes separation between departures from the same airport cleared on the same route.

(b) En Route: At least 20 miles in-trail separation between aircraft at the same cruising altitude along the same route except:

1. Between Priority 1 and other traffic: Can be reduced to standard separation minima if required to accommodate Priority 1 operations.

2. Aircraft deviations due to weather: If aircraft deviate around weather and reduce the 20 miles in-trail separation, the 20 miles in-trail separation shall be reestablished within 50 miles after the aircraft complete their deviation.

Note.—Twenty miles in-trail separation must be maintained to provide for transition to nonradar procedures in the event of radar failure.

(3) Military Operations. (See Appendix 2.)

(4) Long-Range Traffic.

(a) Routes, altitudes, and speed are listed in Appendix 3.

(b) Procedures.

1. Advise Central Flow Control whenever long-range traffic is or will be adversely affected by higher priority operations.

2. Coordinate with Central Flow Control and use flow control procedures as required for oceanic traffic.

3. Advise Central Flow Control of any reduction in long-range facility acceptance rates/capacity.

4. If you receive any permanent cancellations to the long-range flight schedule, refer the caller to Central Flow Control.

5. Ensure that contingency routes, altitudes, and speeds are used to the maximum extent possible. This does not preclude step climbs to final altitude (i.e., assigned FL 290 until the aircraft is able to climb to FL 370).

6. IFR Departure Releases.

a. Ensure that departures are not released more than 5 minutes prior to scheduled departure time.

b. Ensure that departures are not released more than 10 minutes after their scheduled/assigned departure time unless the reason for the late departure is determined by the terminal to be an ATC delay that occurred between the time the pilot called for taxi clearance to the time he reached the end of the runway.

(5) Short-Range Traffic.

(a) Short-range flights shall meet the following criteria:

1. Restricted to FL 230 and below.

2. Transit no more than two centers' airspace.

3. Not be scheduled or approved to operate between midnight and 8:00 a.m. local time.

4. IFR Departure Releases.

a. Ensure that departures are not released more than 5 minutes PRIOR to scheduled departure time.

b. Ensure that departures are not released more than 10 minutes after their scheduled/assigned departure time unless the reason for the late departure is determined by the terminal to be an ATC delay that occurred between the time the pilot called for taxi clearance to the time he reached the end of the runway.

(b) Short-Range cancellation method:

1. Cancellation objective is to ensure no airborne delay.

2. Monitor the system to determine if there are any constraints such as equipment, weather, or personnel shortages or if there are any special aircraft movements that will reduce or are reducing the contingency range airport planned capacity. If the center/airport capacity will be or is being reduced, estimate the duration of time you believe the constraints will exist and cancel flights.

3. Cancel flights in the following order:

a. Second hour approval flights.

b. First hour approval flights.

c. Prescheduled short-range flights.

4. To avoid an adverse impact to the user, every attempt should be made not to cancel flights that are within 30 minutes of departure time. Give ground delays to these flights if the system can accommodate revised capacities. When the weather is forecast to SIGNIFICANTLY impact routes, some flights proposed to transit these routes should be canceled to reduce the demand to a level that can be safely handled unless the approval of reroutes to avoid weather impacted areas will not impact another route or center area. Keep in mind that flights already airborne will have to be absorbed in the system and may have to hold or divert.

5. Advise the adjacent center flow controller to initiate the cancellation activity when the flight originates in an adjacent center.

(c) Arrival Constraints. There may be circumstances when the constraints imposed on the system only affect the arrivals to an airport, i.e., airport below minimum for arrival but not departure, slippery runways affecting an aircraft's turn-off capability, etc. When conditions such as these exist, it may be sufficient

to only reduce arrivals at an impacted airport. To accomplish this, cancel proposed departures to the impacted airport.

(d) Arrival/Departure Constraints. When circumstances such as a one-runway operation or personnel shortage will affect the entire operation, cancel both proposed flights to the impacted airport and the departures from an impacted airport.

(e) Notify users, advise adjacent facilities, and cancel flight plans in computer, when appropriate.

Note.—Once a flight is canceled, it shall remain canceled until the next day.

(6) First Hour Short-Range Approvals. Do not approve first hour flights prior to the second full day of contingency flight operations. Use this time period to assess long and short-range scheduled traffic operations. Identify light over-traffic periods and identify over-traffic causing system overloads, if any.

(7) First Hour Short-Range Traffic. Using first hour flight worksheet (completed during Phase I):

(a) Determine if adequate staffing exists within your center and appropriate terminals within your airspace area to enable approving first hour short-range traffic.

Note.—This should be one additional controller per affected area of specialization.

(b) Coordinate with adjacent ARTCCs to determine if they and their terminals can approve first hour short-range traffic.

(c) Complete (a) and (b) within the first half hour of the shift and approve first hour flights accordingly.

(d) Notify the first hour users of the approvals before the end of the first hour of the shift.

(8) Second Hour Short-Range Approvals. Do not approve second hour flights prior to the second full day of contingency flight operations. Use this time period to assess long- and short-range scheduled traffic operations. Identify slow over-traffic periods and identify over-traffic causing system overloads, if any.

(9) Second Hour Short-Range Traffic. Prior to approving:

(a) Determine center staffing within each area of specialization and associated terminals and determine if second hour flights can be permitted.

(b) If flights can be permitted, coordinate with adjacent centers to determine if their resources will permit second hour intercenter flights.

(10) Second Hour Flight Approval Guidelines.

(a) After receiving staffing information and flight plan requests, the center flow controller shall determine which flights will be approved.

(b) Flights shall only be approved if they can depart and arrive within the last 6 hours of the shift. Consider time zone differences between concerned facilities.

(c) Assign a route, altitude, and departure time. For tower en route flights, assign only a departure time (tower will assign route and altitude).

Note.—Coordinate with adjacent center if required.

(d) For those flights that have been approved, an approval number (SH1, SH2, etc.) shall be assigned to each flight for insertion into remarks in field 11. If the flight is to be made via tower en route, add "TWR ENRT" to the flight plan remarks section. Forward flight plan approvals to the primary A/flight data position.

(e) Log flight identification, filing FSS, departure airport, and approval number on the second hour log (Appendix 34).

(11) Tower En Route Traffic. Approve en route flights only if adequate staffing exists in the towers and the flights meet the following criteria:

(a) Shall operate only between those towers where tower en route service is covered in a letter of agreement.

(b) First or second hour tower en route traffic shall not be approved if doing so would adversely impact the handling of long- or short-range prescheduled flights.

Note.—Second hour approval flights shall be coordinated with the affected towers before approval.

(12) Initiate cancellation of short-range flights departing from airports within your area when requested to do so by an adjacent center flow controller.

(13) In the case of tower en route flights, approvals or cancellations, provide the departure tower with the flight identification, departure time, and destination. First and second hour approvals must be given to the tower as a group rather than one at a time.

c. *Aircraft Relocation.* Review the flight plans approved for relocation purposes to determine if they will have any significant impact on your operation. Notify Central Flow Control of any flights that your ARTCC cannot handle.

Note.—Aircraft relocations are defined as flights during the hours of 1:00 a.m. to 7:00 a.m. local time for the purpose of aircraft maintenance.

Note.—Central Flow Control will schedule relocation flights using a minimum of 20 minutes in-trail separation between city pairs and forward the approved flight plans to the departure center by 8:00 p.m. Eastern time on the day before the proposed departure.

113. *ARTCC Flight Data Monitor.* The following responsibilities are additional to those normally required.

a. *Primary A/Flight Data Position.*

(1) Forward to the flow controller any flight plans received via landlines from FSSs covering operations defined in Handbook 7110.65B, paragraphs 24a through h. Date/time stamp, upon receipt, and ensure that they have been entered into the computer.

(2) Forward to the flow controller for second hour approval, flight plans that were received as information text messages from the FSS. Do not accept any flight plans from other sources. Date, time stamp, or annotate each flight plan when received.

(3) Enter ARTCC flow controller approved flight plans into the computer or forward to the departure tower if tower en route control and there is no FDEP interface. Include second hour approval number/designator in remarks.

(4) Relay flow controller second hour flight plan approvals, via landline, to the FSS which originated the flight plan message.

(5) Do not accept composite flight plans for other than those operations defined in Handbook 7110.65B, paragraphs 24a through h.

114. *Center Controller Position Responsibilities.* The following position responsibilities are in addition to those normally required for positions of operation.

a. *Contingency Traffic Management.* Air Traffic Priorities. Provide air traffic control service based on the priorities in Appendix 41.

b. *Departure Separation at Airports Without Terminal IFR Departure Service.* Use at least 4 minutes separation between departures from the same airport flight planned along the same route.

c. *In-Trail Spacing.*

(1) Use at least 20 miles in-trail separation between aircraft at the same cruising altitude along the same route. Establish separation as soon as possible after aircraft reaches cruising altitude. (See (2) and (3) for exceptions.)

Note.—Twenty miles in-trail separation must be maintained to provide for a transition to nonradar procedures in the event of a radar failure.

(2) Weather Deviations. If aircraft deviate around weather and rduce the 20 miles in-trail separation, the 20 miles in-trail separation shall be reestablished within 50 miles after the aircraft complete their deviations.

(3) Between Priority 1 and other traffic. Can be reduced to standard separation minima if required to accommodate Priority 1 operations.

d. *Military Operations.* (See Appendix 2.)

e. *Use of Routes, Altitudes, and Speeds.* Ensure that contingency plan routes, altitudes, and speeds are used except when weather conditions are causing deviations or deviations are necessary due to Priority 1 flights. (This does not preclude step climbs to final altitude, i.e., assigned FL 290 until the aircraft is able to climb to FL 370.)

Note.—International flights will transition to/from normal and contingency plan routes when they enter/exit the conterminous United States.

f. *Departure Releases at Airports Without Terminal IFR Departure Service.*

(1) Do not release departures more than 5 minutes PRIOR to scheduled/assigned departure time.

(2) Do not release departures more than 10 minutes AFTER scheduled/assigned departure time unless the reason for the late departure can be attributed to an ATC delay at the departure airport. Cancel flights not meeting these criteria.

g. *Flight Cancellation Phaseology.*

(AIRCRAFT IDENT) your flight plan is canceled because ("reason").

Examples: N12345, your flight plan is canceled because of traffic congestion at your destination airport.

N12345, your flight plan is canceled because you were unable to make your takeoff time as scheduled.

h. *Flight Plan Handling.* Do not accept any flight plans except in the case of an in-flight emergency.

i. *System Constraints.* Inform the flow controller whenever:

(1) You are or are about to hold aircraft.

(2) Priority 1 traffic will impact other traffic.

(3) You recognize potential conditions that may cause delays.

(4) No flight plan is in the computer for a flight which the pilot says has been approved. (Secure the flight priority or flight plan approval number from the pilot for the flow controller's use.)

115. *DSO Responsibilities.*

a. The DSO is responsible to ensure that the following guidelines are adhered to:

(1) The primary use of automation resources is to maintain and support the operational systems.

Phase III—Artcc

(2) The ATC computers shall be run in an operational mode as much as possible.

(3) The ATC computers are not shut down (placed in a nonoperational status) unless there is a compelling reason to do so.

(4) Any actions that can cause program interruptions, such as reconfiguration of equipment components, should be avoided unless deemed absolutely necessary.

(5) Normal bulk store is not used.

(6) Contingency bulk store is used.

(7) AAT–550 is notified by phone of all program outages/problems within 1 hour after they occur.

(8) All data reduction and other type printout activities are postponed.

Note.—For accident/incident or high PTR problems, send the tapes to AAT–550 for data reduction.

Chapter 15. Phase III—Terminal Operations

130. *Terminal Facility Chief Responsibilities.* The following responsibilities are additional to those normally required.

a. *Facility Status/Recommendations.* Keep the regional Air Traffic Division apprised of facility status and problems. Make recommendations on changes to facility status or contingency plan operations if appropriate.

b. *Facility Closures/Reduced Hours of Operation.* Coordinate with the region if staffing is reduced to where you believe the facility should reduce its hours of operation or be closed.

c. *Accident/Incident.* See Appendix 38.

d. *Security.* Ensure that security measures and personnel security restrictions are adhered to. (See Appendix 40.)

131. *Terminal Supervisor Responsibilities.* The following responsibilities are additional to those normally required.

a. *Status Reporting to ARTCC.*

(1) Thirty minutes after the start of each shift, be prepared to forward a status report to the ARTCC. Assess your capability to support the contingency plan and include:

(a) Hours of operation.

(b) Personnel resources (nonbargaining unit employees)/adjusted hourly capacity rates.

(c) Equipment status.

(d) Airport status, i.e., runways, taxiways.

(e) Weather.

(f) Any other factors that could affect or is affecting scheduled traffic.

(g) An estimate of what can be anticipated during the current 8-hour shift.

(2) At locations where the tower and approach control are separate facilities, the tower shall forward its status report to the facility providing approach control services for relay to the center.

(3) If there are any constraints that will reduce or are reducing the scheduled planned capacity, take the following action:

(a) Estimate how long the constraints will exist.

(b) Determine the adjusted hourly capacity rates (Appendix 7).

(c) Forward this information immediately to your ARTCC flow controller.

b. *Facility Closures/Reduced Hours of Operation.* Coordinate facility closures and reduced hours of operation as directed by the facility chief with your ARTCC flow controller and servicing FSS.

c. *Contingency Traffic Management.*

(1) *Additional Flight Operations.* Assess your ability to support additional flight operations. Forward this information to your ARTCC flow controller upon request.

(2) *Air Traffic Priorities.* See Appendix 41.

(3) *Constraints.* Advise your ARTCC flow controller:

(a) Whenever your scheduled traffic is or will be adversely affected.

(b) Any time your facility is holding.

(4) *IFR Departure Releases (Tower En Route)*

(a) Ensure that departures are not released more than 5 minutes prior to scheduled departure time.

(b) Ensure that departures are not released more than 10 minutes after their scheduled departure time unless the reason for the late departure is an ATC delay that occurred between the time the pilot called for taxi clearance and the time he reached the end of the runway.

(5) *TCA Operations.*

(a) When the contingency plan is implemented, VFR operations in TCA will not be permitted except VFR departures.

(b) VFR departures shall not be given priority over IFR operations.

(c) Facilities that have TCAs shall place the following on the ATIS: "Unable to approve clearances for aircraft operating VFR through or into the (name) TCA until further advised."

(6) *Taxi Priority for Scheduled Aircraft.* Ensure that priority is given to taxiing scheduled aircraft in accordance with the procedures developed in Phase I.

(7) *TRSA Operations.* Stage III service may not be provided or may be discontinued at the controller's discretion. However, VFR aircraft should be provided Stage III service when the aircraft is expected to operate within close proximity to an IFR aircraft. Place the following on the ATIS: "Stage III service may not be available or may be terminated at the controller's discretion due to IFR traffic workload."

(8) *Military Operations.* See Appendix 2.

(9) *Flight Plan Cancellations.* When notified by a user of a contingency plan schedule flight permanent cancellation, refer the caller to Central Flow Control.

(10) *Automation Operations.* Air traffic control computers shall be run in an operational mode as much as possible while this plan is in effect. Do not shut down the computer unless there is a compelling reason to do so.

132. *Terminal Controller Position Responsibilities.* The following responsibilities are additional to those normally required.

a. *Contingency Traffic Management.* Air Traffic Priorities. Provide air traffic control service based on the priorities in Appendix 41.

(1) *Contingency Separation.* Provide at least 4 minutes separation between departures from the same airport flight planned along the same departure route, except Prority 1 aircraft can be released with standard separation.

(2) *IFR Departure Clearances.* Issue full route clearances in all cases. Cleared as filed shall not be used while the contingency plan is in effect.

Note.—SID names may be used if appropriate.

(3) *IFR Departure Releases.*

(a) Ensure that departures are not cleared for takeoff more than 5 minutes prior to scheduled departure time.

(b) Ensure that departures are not cleared for takeoff more than 10 minutes after their scheduled/assigned departure time unless the reason for the late departure is ATC delay that occurred between the time the pilot called for taxi clearance and the time he reached the end of the runway.

(4) *Flight Cancellation Phraseology.*

(AIRCRAFT IDENT), your flight plan is canceled because ("reason").

Examples: N12345, your flight plan is canceled because of traffic congestion at your destination airport.

N12345, your flight plan is canceled because you were unable to make your departure time as scheduled.

(5) *IFR Clearance Requests—No Flight Plan Available.* When a flight requests clearance and there is no flight plan available:

(a) If an air carrier, advise the center controller.

(b) If other than an air carrier, request the aircraft to provide a flight priority code or a flight approval number. Advise the center controller including the pilot's response to the request.

(6) *TCA Operations.*

(a) Disapprove requests for VFR operations through or into the TCA using the following phraseology:

1 Through TCA. "Unable to approve clearance THROUGH TCA. See NOTAM (number).

2 Landing at Airport in TCA. "Unable to approve clearance into TCA. See NOTAM (number)."

(b) Approve VFR departues from the TCA if and when workload permits. If a departure cannot be approved when requested, use the following phraseology: "Unable to approve departure from TCA at the present time; expect departure clearance (time)."

(c) When departures are approved, issue clearances in the order requested.

(7) *TRSA Operations.* Stage III service has been made optional at the controller's discretion dependent upon workload by national NOTAM; however, provide State III service when the aircraft will operate within close proximity to an IFR aircraft if possible.

PHRASEOLOGY: "Unable to provide State III service."

(8) *VFR Operations—Non-TCA Airports.*

(a) Give IFR traffic priority over VFR traffic and delay VFR traffic as necessary.

(b) Discontinue local aircraft operations, as required.

(9) *Flight Plan Handling.* Refer all requests to process flight plans to your servicing flight service station.

(10) *Gate Hold.* Ensure that pilots of departing aircraft receive their IFR clearances before they start taxiing.

(11) *Tower En Route.* Do not approve tower en route operations unless they have been approved by the center flow controller.

Note.—A list of approved tower en route flights will be provided by the center flow control position at the end of the first hour of the shift. The list will be updated at the end of the second hour of the shift. The list will include flight call sign, departure time, and destination for each approved flight.

(12) *Holding.* Notify your supervisor when holding is imminent.

(13) *Taxi Priority.* Give priority to taxiing scheduled traffic in accordance with the procedures developed in Phase I.

133. *DSO (or Chief's Designee) Responsibilities.* The DSO is responsible to ensure that the following instructions are adhered to by personnel performing the operational data systems duties.

a. The primary use of automation resources is to keep the automation system operational.

b. The ATC computers shall be run in an operational mode as much as possible.

c. The ATC computers are not shut down (placed in a nonoperational status) unless maintenance MUST be performed. If it is necessary to shut down, adjust hours of computer operation to cover busiest contingency traffic periods if possible.

d. Any actions that can cause program interruptions, such as reconfiguration of equipment components, should be avoided unless deemed absolutely necessary.

e. Problem reporting: Notify AAT-550 by phone of all program outages/problems within 1 hour after they occur.

f. No data reduction and other type printout activities shall be performed. For accident/incident or high PTR problems, send the charts/tapes to AAT-550 for data reduction, if requested.

Chapter 16. Phase III—Flight Service Station

140. *Facility Chief Responsibilities.*

a. *Flight Plan Handling.*

(1) Accept and process in a normal manner flight plans on the following:

(a) FAA aircraft.

(b) Operations covered in Handbook 7110.65B, paragraphs 24a through h. In addition, call the departure center primary "A" flight data position on these flights via landline and forward the call sign, proposed departure point, proposed departure time, and destination.

(2) DO NOT accept composite flight plans for other than those operations defined in Handbook 7110.65B, paragraphs 24a through h.

(3) DO NOT accept second hour approval flight plans unless they are filed:

(a) Between 0000 and 0800 local time for flights departing between 1000 and 1600 local time.

(b) Between 0800 and 1600 local time for flights departing between 1800 and 2400 local time.

(4) Inform the person filing the flight plan that acceptance does not constitute approval, and if an approval is not received by 10:00 a.m. or 6:00 p.m. as appropriate, the flight plan is automatically disapproved. Also:

(a) Record the caller's name/telephone number to enable forwarding of center flow controller approvals, if and when received.

(b) Teletype to appropriate centers as information text messages and include the time the flight plan was filed.

(c) Relay center flow controller flight plan approvals to points of contact/telephone numbers that were recorded.

Note.—Second hour approval aircraft will not fly the first day the plan is in effect.

(5) DO NOT accept IFR flight plans on "fast file" systems. Include instructions

on fast file tape to call another number with IFR flight plans.

(6) Ensure that all priority 1 flight plans are transmitted to the center upon receipt. Ensure that all second hour flight plans are transmitted to the center no later than 30 minutes after the close of the filing period, i.e., 0830 or 1630.

b. *Military Operations.* See Appendix 2.

Appendices to Phases II and III

2. Airports Expected to Generate Priority Military Operations.[1]
3. Assigned Long-Range Routes, Altitudes, and Speeds.[4]
5. Coded Route Between Long-Range City Pairs.[2]
7. Acceptance Rate at ATCTs.[3]
8. Terminal Staffing and Acceptance Rates.[3]
9. Terminal EPDSs Used for Staffing.[3]
10. Center Staffing.[3]
11. Flow Control Staffing and Schedule.[3]
12. Data Systems Personnel Shift Coverage.[3]
34. Second Hour Flight Log.[3]
36. NOTAM/GENOT and Specal Messages.[4]
38. Incident/Accident Handling Procedures.[4]
40. Security.[1]
41. Air Traffic Priorities[2]
42. Procedures for Nonimpacted Center(s).[3]

Appendix 41

Air Traffic Service Priorities

Priority 1 (a) (Code Word) *CRITICAL*—Critical Movement of military aircraft for national defense, Presidential, Vice Presidential, FAA aircraft, NEACP, FLYNET, GARDEN PLOT, SAMP, SAR, EMERGENCY AIR EVAC, EMERGENCY.

Handling Method—Cleared via the routes, altitudes, speeds and at the time requested, without regard to scheduled traffic.

Priority 1 (b) (Code Word) URGENT—Priority movement of military aircraft in the NATIONAL INTEREST.

Handling Method—The flight must be handled; however, adjustments may be made to the requested flight plan.

Note.—The maximum adjustments possible are being coordinated with the military and will be provided in an update to the plan.

Priority 1 (c)—AIR EVAC, MEDEVAC, other medically required flights.

Handling Method—The flight must be handled; however, adjustments may be made to the requested flight plan. Departures can be delayed up to 30 minutes and route and altitude adjustments can be made unless the pilot advises the proposed change will adversely affect the medical aspect of the flight.

Priority 2—National flight schedule air carrier and air taxi flights. (1) Long-Range I operations. (2) Long-Range II operations. (3) Short-Range operations.

Handling Method—Cleared via contingency plan routes, altitudes, speeds to depart not earlier than 5 minutes prior to and not later than 10 minutes after scheduled departure time.

Note.—Late departures will be permitted if lateness is attributed to an ATC delay between the time he requests clearance to taxi and the aircraft arrival at the runway.

Priority 3—Prescheduled first hour approval flights.

Handling method—Cleared via contingency plan routes, altitudes, speeds to depart not earlier than 5 minutes prior to and not later than 10 minutes after scheduled departure time.

Note.—Late departures will be permitted if lateness is attributed to an ATC delay between the time he requests clearance to taxi and the aircraft arrival at the runway.

Priority 4—Second hour approval flights (all other military and civil flight operations).

Handling Method—Cleared via routes, altitudes, and speeds based on available personnel resources. Aircraft shall not depart earlier than 5 minutes prior to and not later than 10 minutes after the approved departure time.

Note.—Late departures will be permitted if lateness is attributed to an ATC delay between the time he requests clearance to taxi and the aircraft arrival at the runway.

Appendix 5

Coded routes between city pairs.

The contingency routes are coded by number. Associated direction designators for each airway are assigned elsewhere in this plan. Altitudes are assigned by distance and direction to coded routes generally as follows:

Airway direction		Altitude assignments
370	E	Over 800 miles.
350	W	Over 800 miles.
330	N	Over 800 miles.
310	S	Over 800 miles.
290	E	Between 500 and 800 miles.
280	W	Between 500 and 800 miles.
270	N	Between 500 and 800 miles.
260	S	Between 500 and 800 miles.

From—	To—	Coded route	Route
		New York ARTCC	
ABE	ORD	4-16	J60 J89 ORD.
EWR	ATL	36-34	J37 ATL.
EWR	BNA	36-34A-14	J37 GVE J147 BKW J42 BNA.
EWR	DEN	2-12	RBV J60 MCI J24 SLN J102 J17 DEN.
EWR	DFW	36-34A-14	J37 GVE J147 BKW J42 DFW.
EWR	FLL	32	J37 CYN J79 ILM CLB AR1 BSY FLL.
EWR	IAH	36-34A-14-40A.	J37 GVE J147 BKW J42 J180 IAH.
EWR	IND	2	RBV J60 IND.
EWR	LAS	2-22A	RBV J60 MCI J24 SLN J102 ALS J64 FMN J110 BLD LAS.
EWR	LAX	2-18-18A-10.	RBV J60 IND J24 STL J19 LVS J8 INW J96 PRC J10 TNP J4 LAX.
EWR	MCI	2	RBV J60 MCI.
EWR	MCO	36-3	J37 GVE J75 J45 JAX J53 MCO.
EWR	MEM	35-34A-14	J37 GVE J147 BKW J42 BNA.
EWR	MIA	32	J37 CYN J79 ILM CLB AR1 BSY MIA.
EWR	MSP	6	J95 BUF J547 ECK J38 GRB J106 MSP.
EWR	MSY	36-34	J37 MSY.
EWR	ORD	6-6B	J95 BUF J547 ORD.
EWR	PBI	32	J37 CYN J79 ILM CLB AR1 CDEIN PBI.
EWR	SDF	2-J39	RBV J60 J39 SDF.
EWR	SFO	4	RBV J60 ILC J198 MVA J84 OAK SFO.
EWR	SRQ	36	J37 GVE J75 PIE SRQ.
EWR	STL	2-18	RBV J80 IND J24 STL.
EWR	TPA	36	J37 GVE J75 TPA.
ISP	ORD	Direct-JFK-6-	J95 BUF J547 ORD.
JFK	ATL	36-34	J37 ATL.
JFK	CAE	36	J37 GVE J75 CAE.
JFK	CHS	36-3B	J37 GVE J75 CAE J47 CHS.
JFK	DEN	2-12	RBV J60 MCI J24 SLN J102 J17 DEN.
JFK	DFW	36-34A-14	J37 GVE J147 BKW J42 DFW.
JFK	FLL	32	J37 CYN J79 ILM CLB AR1 BSY FLL.
JFK	FMY	36-5	J37 GVE J75 PIE SRQ J58 FMY.
JFK	IAH	36-34A-14-40A.	J37 GVE J147 BKW J42 J180 IAH.
JFK	IND	2	Direct RBV J60 IND.
JFK	JAX	36-3	J37 GVE J75 J45 JAX.
JFK	LAS	2-22A	Direct RBV J60 MCI J24 SLN J102 ALS J64 FMN J110 BLD LAS.
JFK	LAX	2-18-18A-10.	Direct RBV J60 IND J24 STL J19 LVS J8 INW J96 PRC J10 TNP J4 LAX.
JFK	MCO	36-3	J37 GVE J75 J45 JAX J53 MCO.
JFK	MIA	32	J37 CYN J79 ILM CLB AR1 BSY MIA.
JFK	MSP	6	J95 BUF J547 ECK J38 GRB J106 MSP.
JFK	MSY	36-34	J37 MSY.
JFK	ORD	6-6B	J95 BUF J547 ORD.
JFK	PBI	32	J37 CYN J79 ILM CLB AR1 CDEIN PBI.
JFK	PHX	2-18	Direct RDV J60 IND J24 STL J19 LVS J18 PHX.
JFK	SAN	2-18	Direct RDV J60 IND J24 STL J19 LVS J18 SAN.
JFK	SEA	6	J95 BUF J547 ECK J38 GRB J106 MSP J70 ABR J50 SEA.
JFK	SFO	4	Direct RBV J60 ILC J198 MVA J84 OAK SFO.
JFK	SLC	6-24-44	J95 BUF J547 ECK J38 GRB J106 MSP J70 ABR J32 SLC 360°R SLC.
JFK	SRQ	36	J37 GVE J75 PIE SRQ.
JFK	STL	2-18	Direct RBV J60 IND J24 STL.
JFK	TPA	36	J37 GVE J75 PIE TPA.
LGA	ATL	36-34	J37 ATL.
LGA	BHM	36-34-20	J37 ATL J52 BHM.

[1] Not available for security reasons.
[2] Not complete at this time. Copies may be obtained at a later date.
[3] Included in published material.
[4] Copies may be obtained in Room 429, 800 Independence Avenue, S.W., Washington, D.C.

From—	To—	Coded route	Route
LGA	BNA	36-34A-14	J37 GVE J147 BKW J42 BNA.
LGA	CAE	36	J37 GVE J75 CAE.
LGA	CVG	2-50B	Direct RBV J60 J39 CVG.
LGA	DAB	36-3-JAX-J45.	J37 GVE J75 J45 DAB.
LGA	DFW	36-34A-14	J37 GVE J147 BKW J42 DFW.
LGA	FLL	32	J37 CYN J79 ILM CLB AR1 BSY FLL.
LGA	IAH	36-34A-14-40A.	J37 GVE J147 BKW J42 J180 IAH.
LGA	IND	2	Direct RBV J60 IND.
LGA	JAX	36-3	J37 GVE J75 J45 JAX.
LGA	MCI	2	Direct RBV J60 MCI.
LGA	MCO	36-3	J37 GVE J75 J45 JAX J53 MCO.
LGA	MEM	36-34A-14	J37 GVE J147 BKW J42 MEM.
LGA	MIA	32	J37 CYN J79 ILM CLB AR1 BSY MIA.
LGA	MKE	6-6B-39A	J95 BUF J547 J34 MKE.
LGA	MSP	6	J95 BUF J547 ECK J38 GRB J106 MSY.
LGA	MSY	36-34	J37 MSY.
LGA	OKC	36-34A-14-20.	J37 GVE J147 BKW J42 J14 OKC.
LGA	ORD	6-6B	J95 BUF J547 ORD.
LGA	PBI	32	J37 CYN J79 ILM CLB AR1 CORBIN PBI.
LGA	SDF	2-50B	Direct RBV J60 J39 SDF.
LGA	STL	2-18	Direct RBV J60 IND J24 STL.
LGA	TPA	36	J37 GVE J75 TPA.
MDT	ORD	J152-2A-4-16.	J152 J61 PSB J60 J89 ORD.
PHL	ATL	Direct-ENO-36-34.	Direct ENO J37 ATL.
PHL	BNA	Direct-ENO-36-34A-14.	Direct ENO J37 GVE V147 BKW J14 BNA.
PHL	DEN	2A-2-12	J110 J80 MCI J24 SLN J102 J17 DEN.
PHL	DFW	14	Direct EWT J42 DFW.
PHL	FLL	Direct-SIE-32.	Direct SIE J79 ILM CLB AR1 BSY FLL.
PHL	IAH	14-40A	Direct EWT J42 J180 IAH.
PHL	IND	2A-2	J110 J80 IND.
PHL	JAX	Direct-ENO-36-3.	Direct ENO J37 GVE J75 J45 JAX.
PHL	LAX	2A-2-10	J110 J80 MCI J24 SLN J102 ALS J64 LAX.
PHL	MCI	2A-2	J110 J80 MCI.
PHL	MCO	Direct-ENO-36-3.	Direct ENO J37 GVE J75 J45 JAX J53 MCO.
PHL	MIA	Direct-SIE-32.	Direct SIE J79 ILM CLB AR1 BSY MIA.
PHL	MKE	2A-4-39A	J110 J61 PSB J60 CLE J34 MKE.
PHL	MSP	2A-4-39A-30	J110 J61 PSB J60 CLE J34 BAE J70 MSP.
PHL	MSY	Direct-ENO-36-34.	Direct ENO J37 MSY.
PHL	ORD	2A-4-16	J110 J61 PSB J60 J89 ORD.
PHL	PBI	Direct-SIE-32.	Direct SIE J79 ILM CLB AR1 CORBIN PBI.
PHL	PHX	2A-2-18	J110 J80 IND J24 STL J19 LVS J18 PHX.
PHL	SDF	2A-2-50B	J110 J80 J39 SDF.
PHL	SFO	2A-4	J110 J61 J60 ILC J198 MVA J84 OAK SFO.
PHL	STL	2A-2-18	J110 J80 IND J24 STL.
PHL	TPA	Direct-ENO-36-34.	Direct ENO J37 GVE J75 PIE TPA.
DEN	ALO	11-9	J114 ONL J94 ALO.
DEN	ATL	48-3	J20 LBL J98 OKC J78 TUL J46 J41 MEM J66 RME ATL.
DEN	BAL	15-13	J80 MCI J24 STL J134 ILM J24 CRW J8 BAL.
DEN	BNA	15-36	J80 MCI J24 STL J134 J73 BNA.
DEN	BOS	11-9-7A-1A-7.	J114 ONL J94 OBK J584 CRL J554 JHW J82 ALB J16 BOS.
DEN	CAK	15-1-7A	J80 GLD J192 PWE J64 BDF J18 JOT J146 J34 CLE CAK.

From—	To—	Coded route	Route
DEN	CID	11-9-ALO Direct.	J114 ONL J94 ALO CID.
DEN	CLE	15-1-7A	J80 GLD J191 PWE J64 BDF J18 JOT J146 J34 CLE.
DEN	DFW	48	J20 LBL J98 OKC J21 DFW.
DEN	DTW	11-9-7A	J114 ONL J94 OBK J584 CRL DTW.
DEN	EWR	15-1	J80 GLD J192 PWE J64 BDF J18 JOT J146 EWR.
DEN	FAT	22-22A-8	J128 J110 FAT.
DEN	FWA	15-1-9	J80 GLD J192 PWE J64 BDF J18 JOT J146 J89 J50 FWA.
DEN	GEG	12-12A	J116 EKR J173 SLC J15 BOI J517 GEG.
DEN	GRR	11-9-7B-MKG-Direct.	J114 ONL J94 FOD J132 MCW J16 MKG GRR.
DEN	IAD	15-13	J80 MCI J24 STL J134 ILM J24 CRW J8 CSN IAD.
DEN	IAH	48-42	J20 LBL J98 OKC J21 DFW J57 IAH.
DEN	JFK	15-1	J80 GLD J192 PWE J64 BDF J18 JOT J146 JFK.
DEN	LIT	48-3-J101	J20 LBL J98 OKC J78 TUL J46 J101 LIT.
DEN	MBS	11-9-7B	J114 ONL J94 FOD J132 MCW J16 MBS.
DEN	MEM	48-3	J20 LBL J98 OKC J78 TUL J46 J41 MEM.
DEN	MIA	48-19-38-36-5	J20 LBL J98 OKC J21 DFW J4 MGM J20 TLH J43 PIE SRQ J58 BSY MIA.
DEN	MKE	11-9-7B	J114 ONL J94 FOD J132 MCW J16 MKE.
DEN	MLI	15-1-LMN-Direct.	J80 GLD J192 PWE J64 MLI.
DEN	MSY	48-19-40	J20 LBL J98 OKC J21 DFW J4 JAN J35 MSY.
DEN	OAK	4	J60 ILC J198 MVA J84 OAK.
DEN	ORD	11-9	J114 ONL J94 OBK ORD.
DEN	PDX	12	J116 EKR J173 SLC J15 PDX.
DEN	PHL	15-1-MIP-Direct.	J80 GLD J192 PWE J64 BDF J18 JOT J146 MIP PHL.
DEN	PIA	15-1-BDF-Direct.	J80 GLD J192 PWE J64 BDF PIA.
DEN	PIT	15-39B	J80 MCI J24 STL J134 ILM J24 J91 AIR PIT.
DEN	RNO	4-57	J60 ILC J198 MVA J92 RNO.
DEN	SAT	48-42A	J20 LBL J98 OKC J21 DFW J25 SAT.
DEN	SBN	15-1	J80 GLD J192 PWE J64 BDF J18 JOT J146 SBN.
DEN	SDF	15-38-J8	J80 MCI J24 STL J134 J73 J8 SDF.
DEN	SEA	12-45	J116 EKR J173 SLC J15 PDX J1 SEA.
DEN	SFO	4	J60 ILC J198 MVA J84 OAK SFO.
DEN	SJC	4-LIN-Direct.	J60 ILC J198 MVA J84 LIN SJC.
DEN	SMF	4-LIN-Direct.	J60 ILC J198 MVA J84 LIN SMF.
DEN	TOL	15-1	J80 GLD J192 PWE J64 BDF J18 JOT J146 TOL.
DEN	TPA	48-19-38	J20 LBL J98 OKC J21 DFW J4 MGM J20 TLH J43 PIE TPA.
COS	DFW	1-48	J146 J20 LBL J98 OKC J21 DFW.
COS	ORD	12-11-9	J17 DEN J114 ONL J94 OBK ORD.

Denver ARTCC Lft-II

From—	To—	Coded route	Route
DEN	BOI	12	J116 EKR J173 SLC J15 BOI.
DEN	BUR	22-2	J128 TBC J64 LAX BUR.
DEN	ELP	54-54A	J17 PUB J104 ONM J57 TCS J13 J86 ELP.
DEN	LAX	22-2	J128 TBC J64 LAX.
DEN	LAS	22-22A	J128 J110 BLD LAS.
DEN	MSP	11	J114 MSP.
DEN	ONT	22-2	J128 TBC J64 ONT.
DEN	PHX	54-18	J17 PUB J104 LVS J18 PHX.
DEN	SAN	54-18	J17 PUB J104 LVS J18 SAN.
DEN	STL	15	J80 MCI J24 STL.
DEN	TUS	54-10	J104 SSO TUS.

Albuquerque ARTCC

From—	To—	Coded route	Route
ABQ	ATL	3	ABQ J78 TUL J46 J41 MEM J66 RMG-ATL.
ABQ	ORD	51-11-7A	ABQ J13 DEN J114 FSD J16 MCW J90 OBK-ORD.
ABQ	SAT	54A-5	ABQ J57 TCS J13 J86 ELP J2 FST J138-SAT.
ABQ	SFO	16-8-45	ABQ J18 SJN J108 INW J86 BLD J110 OAK-SFO.
ELP	SFO	51-8-45	J86 J13 TCS J108 INW J86 BLD J110 SNS J110 OAK-SFO.
TUS	HOU	5	J2 FST J138 HUB-HOU.
TUS	JFK	5-13	J2 ELP J50 ABI J4 DFW J66 LIT J6 CRW J8 RBV J150 JFK.
TUS	ORD	47-5A-3-51-11-7A.	J11 PHX J19 ZUN J78 ABQ J13 DEN J114 FSD J16 MCW J90 OBK-ORD.
TUS	SFO	47-57-8-45.	J11 PRC J92 BLD J110 SNS J110 OAK-SFO.
PHX	ATL	5A-3	J19 ZUN J78 TUL J46 J41 MEM J66 RMG-ATL.
PHX	CLE	5A-3-3A-35-1-7A.	J19 ZUN J78 TUL J98 SGF J105 BDF J18 JOT J146 J34-CLE.
PHX	DSM	5A-3-51-1-LMN-Direct.	J19 ZUN J78 ABQ J13, J146 GLD J192 PWE J64 LMN-DSM.
PHX	DTW	5A-3-51-11-7A.	J19 ZUN J78 ABQ J13 DEN J114 FSD J16 MCW J90 OBK J584 CRL-DTW.
PHX	HOU	44-5	J11 J2 FST J138 HUB-HOU.
PHX	IAD	5A-3-13	J19 ZUN J78 TUL J46 J41 J6 CRW J8 CSN-IAD.
PHX	IAH	44-5-17	J11 J2 FST J138 SAT J2 IAH.
PHX	IND	5A-3-3A-15-33.	J19 ZUN J78 TUL J98 SGF J8 STL J134 J89 IND.
PHX	JFK	5A-3-13	J19 ZUN J78 TUL J46 J41 J6 CRW J8 RBV J150 JFK.
PHX	MKE	5A-3-51-11-7A-ZU.	J19 ZUN J78 ABQ J13 DEN J114 FSD J16 MKE.
PHX	MSP	5A-3-51-11.	J19 ZUN J78 ABQ J13 DEN J114 MSP.
PHX	OAK	47-57-8-45.	J92 BLD J110 OAK.
PHX	ORD	5A-3-51-11-7A.	J19 ZUN J78 ABQ J13 DEN J114 FSD J16 MCW J90 OBK-ORD.
PHX	PDX	47-12	J11 SLC J15 PDX.
PHX	PHL	5A-3-13	J19 ZUN J78 TUL J46 J41 J6 CRW J8 RBV-PHL.
PHX	PIT	5A-3-3A-15-39B	J19 ZUN J78 TUL J98 SGF J8 STL J134 FLM J24 J91 AIR-PIT.
PHX	RNO	47-57	J92-RNO.
PHX	SAT	44-5	J11 J2 FST J138 SAT.
PHX	SFO	47-57-8-45.	J92 BLD J110 OAK SFO.
PHX	SJC	47-57-8-45.	J92 BLD J110 SNS-SJC.
PHX	SMF	47-57-4-LIN-Direct	J92 J84 LIN SMF.

Albuquerque Lft-II

From—	To—	Coded route	Route
ABQ	DFW	3-48	J78 OKC J21 DFW.
ABQ	LAX	18-10	J18 J4 J64 LAX.
ABQ	MCI	3-37-15	J78 OKC J21 J80 MCI.
ABQ	STL	3-3A	J78 TUL J98 SGF J8 STL.
ELP	DEN	51	J13 DEN.
ELP	LAX	10	J4 J64 LAX.
ELP	SAN	10-18	J4 J18 SAN.
PHX	DEN	5A-3-51	J19 ZUN J78 ABQ J13 DEN.
PHX	DFW	44-5-13	J11 J2 ELP J50 TQA J4 DFW.
PHX	MCI	5A-3-37-15.	J19 ZUN J78 OKC J21 J80 MCI.
PHX	OKC	5A-3	J19 ZUN J78 OKC.
PHX	STL	5A-3-3A	J19 ZUN J78 TUL J98 SGF J8 STL.

From—	To—	Coded route	Route
PHX	DEN	CIE SSO J168 TCS 51.	CIE SSO J168 TCS J13 DEN.
PHX	DFW	5-13	CIE J2 ELP J50 TQA J4 DFW.
PHX	STL	5-13-35-SA.	CIE J2 ELP J50 TQA J4 DFW J105 SGF J8 STL.
Chicago Center			
ALO	DEN	Direct DSM-4.	Direct DSM J25 J60.
CID	DEN	Direct DSM-4.	Direct DSM J25 J60.
CMI	BAL	Direct LEU-35-15-13.	Direct LEU J73 J134 FLM J24 CRW J8 CSN Direct.
DSM	PHX	42-18	J25 BUM J19 LVS J18.
DSM	LAX	4-22-2	J60 DEN J128 TBC J64.
FWA	ATL	9-50-34	J149 J85 SPA J37.
FWA	DEN	18A-4	J64 WHETT J30 JOT J60.
GRR	DEN	39A-30-22	J34 BAE J16 FSD J114.
MKE	ATL	38-3	J89 OBK J73 BNA J75 J66 RMG Direct.
MKE	BOS	7B-7	J16 ECK J547 BUF J16 BOS.
MKE	DCA	38-9-FRR-Direct.	J89 J30 FRR Direct.
MKE	DEN	30-32	J16 FSD J114.
MKE	DFW	30-42	J16 MCW J25.
MKE	LAX	30-22-2-10.	J16 FSD J114 DEN J128 TBC J64.
MKE	LGA	7A-1	J584 CRL J34 J146 JFK LGA.
MKE	MIA	38-36-5	J89 OBK J73 TLH J43 PIE Direct SRQ J58 BSY Direct.
MKE	PHX	30-22-54-18.	J16 FSD J114 DEN J17 PUD J104 LVS J18.
MKE	SFO	30-22-4	J16 FSD J114 DEN J60 ILC J198 MVA J84 OAK SFO.
MKE	TPA	38	J89 OBK J73 TLH J43 PIE-TPA.
MLI	DEN	4	Direct IOW J60 DEN.
MLI	DFW	4-42	Direct IOW J60 J25 DFW.
ORD	ABE	1-ETG-Direct.	J89 J146 ETG Direct ABE.
ORD	ABQ	40-18	J71 J24 STL J19 LVS J18 ABQ.
ORD	ALB	7A-1A	J584 CRL J554 JHW J82 ALB.
ORD	ATL	38-3	J73 J66 RMG Direct ATL.
ORD	BAL	9-EMI-Direct.	J89 J30 FRR J6 EMI Direct BAL.
ORD	BDL	7A-1A-ALB-Direct.	J584 CRL J554 JHW J82 ALB Direct BDL.
ORD	BHM	38-20	J73-J52 BHM.
ORD	BIL	33-6-MLS-Direct.	J89 BAE J70 ABR J90 MLS Direct BIL.
ORD	BOI	33-6-24-12.	J89 BAE J70 ABR J32 J15 BOI.
ORD	BOS	7A-1A-7	J584 CRL J554 JHW J82 ALB J16 BOS.
ORD	CLT	9-50	J89 J30 J85 SPA Direct CLT.
ORD	COS	4-54	JOT J60 DFW J17 COS.
ORD	DCA	9-FRR-Direct.	J89 J30 FRR Direct DCA.
ORD	DEN	4	JOT J60 DEN.
ORD	DFW	40-18-42	J71 J24 STL J19 BWM J25 DFW.
ORD	EWR	1	J89 J146 EWR.
ORD	FAT	4-MVA-Direct.	JOT J60 ILC J198 MVA Direct FAT.
ORD	FLL	38-36-5	J73 TLH J43 PIE SRQ J58 BSY Direct FLL.
ORD	FMY	38-36-5	J73 TLH J43 PIE SRQ J58 FMY.
ORD	GSO	9-50-17B	J89 J30 J85 SPA J14 GSO.
ORD	IAD	9-FRR-Direct.	J89 J30 FRR Direct IAD.
ORD	IAH	40-40A	J71 MEM J42 J160 IAH.
ORD	ISP	1-JFK-Direct.	J89 J146 JFK Direct ISP.
ORD	JAX	38-3	J73 J66 RMG Direct ATL J45 JAX.
ORD	JFK	1	J89 J146 JFK.
ORD	LAS	4-22-22A	JOT J60 DFN J128 J110 BLD LAS.
ORD	LAX	4-22-2-10	JOT J60 DEN J128 TBC J64 LAX.
ORD	LGA	1	J89 J146 LGA.
ORD	MCO	38-55	J73 TLH J43 PIE J103 MCO.
ORD	MDT	1-ETG-Direct.	J89 J146 ETG Direct MDT.
ORD	MIA	38-36-5	J73 TLH J43 PIE SRQ J58 BSY MIA.
ORD	MRY	4-LIN-Direct SNS Direct.	JOT J60 ILC J198 MVA J84 LIN SNS MRY.
ORD	MSY	40	J71 MEM J35 MSY.
ORD	OAK	4-LIN-Direct.	JOT J60 ILC J198 MVA J84 LIN OAK.
ORD	OKC	40-18-42-BD.	J71 J24 STL J19 BUM J25 J14 OKC.
ORD	ONT	4-22-2	JOT J60 DEN J128 TBC J64 ONT.
ORD	ORF	38-15-RIC Direct ORF.	J73 J134 FLM J24 RIC ORF.
ORD	PBI	38-36-SRQ PHK Direct.	J73 TLH J43 PIE SRQ PHK PBI.
ORD	PDX	33-6-46	J89 BAE J70 ABR J90 SEA J160 PDX.
ORD	PHF	38-15-RIC-Direct.	J73 J134 FLM J24 RIC PHF.
ORD	PHL	1-MIP Direct.	J89 J146 MIP PHL.
ORD	PHX	40-18	J71 J24 STL J19 LVS J18 PHX.
ORD	PSP	40-18-18A-TNP-Direct.	J71 J24 STL J19 LVS J8 INW J96 PRC J10 TNP PSP.
ORD	PVD	7A-1A-7-BDL-Direct.	J584 CRL J554 JHW J82 ALB J16 BOS PVD.
ORD	RDU	38-15-36-DRAIK-Direct.	J73 J134 FLM J24 J75 DRAIK RDU.
ORD	RIC	38-15	J73 J134 FLM J24 RIC.
ORD	RNO	4-57	JOT J60 ILC J198 MVA J84 J92 RNO.
ORD	ROA	38-15-CRW-Direct.	J73 J134 FLM J24 CRW ROA.
ORD	SAN	40-18	J71 J24 STL J19 LVS J18 SAN.
ORD	SAT	40-18-42-42A.	J71 J24 STL J19 BUM J25 SAT.
ORD	SEA	33-6	J89 BAE J70 ABR J90 SEA.
ORD	SFO	4	JOT J60 ILC J198 MVA J84 OAK SFO.
ORD	SJC	4-LIN-Direct	JOT J60 ILC J198 MVA J84 LIN SJC.
ORD	SLC	4-12	JOT J60 DEN J116 EKR J173 SLC.
ORD	SMF	4-LIN-Direct.	JOT J60 ILC J198 MVA J84 LIN SMF.
ORD	SRQ	38-36	J73 TLH J43 PIE SRQ.
ORD	SYR	7A-1A-J29	J584 CRL J554 JHW J29 SYR.
ORD	TPA	38	J73 TLH J43 TPA.
ORD	TUL	40-18-42	J71 J24 STL J19 BUM J25 TUL.
ORD	TUS	40-18-54-SSO-J104.	J71 J24 STL J19 LVS J104 TUS.
ORD	ACA	International.	
ORD	AMS		
ORD	ANC		
ORD	BRU		
ORD	FRA		
ORD	HNL		
ORD	LHR		
ORD	MEX		
ORD	NAS		
ORD	SJU		
ORD	YMX		
ORD	YVR		
ORD	YWG		
ORD	YYC		
PIA	ATL	38-3	Direct DNV J73 J66 RMG ATL.
PIA	DEN	Direct IOW-4.	Direct IOW J60 DEN.
SBN	DEN	Direct GSH-4.	JOT J60 DEN.
Chicago Center L-II			
ORD	ICT	40-18	J71 STL J19 ICT.
Kansas City ARTCC			
STL	BAL	15-13	J134 FLM J24 CRW J8 CSN BAL.
STL	BOS	15-53-7	J134 FLM J24 CRW J78 PSB J49 ALB J16 BOS.
STL	BUF	43-35-7B-7.	J45 J105 BAE J16 ECK HL547 BUF.
STL	CLT	15-50-SPA-Direct.	J134 FLM J24 CRW J85 SPA CLT.
STL	DCA	15-13	J134 FLM J24 CRW J8 CSN DCA.
STL	EWR	15-13	J134 FLM J24 CRW J8 RBV EWR.
STL	FLL	58-38-5	J45 BNA J73 TLH J43 PIE SRQ J58 BSY FLL.
STL	HOU	58-40-40A	J45 J71 MEM J42 J160 HOU.
STL	IAH	58-40-40A	J45 J71 MEM J42 J160 IAH.
STL	JFK	15-13	J134 FLM J24 CRW J8 RBV JFK.
STL	LAS	43-2-22A	J45 J80 MCI J24 SLN J102 ALS J64 FMN J110 BLD LAS.
STL	LAX	18-18A-10	J19 LVS J8 INW J96 PRC J10 TNP J4 J64 LAX.
STL	LGA	15-13	J134 FLM J24 CRW J8 RBV JFK.
STL	MCO	58-38-55	J45 BNA J73 TLH J43 PIE J103 ORL MCO.
STL	MIA	58-38-5	J45 BNA J73 TLH J43 PIE SRQ J58 BSY MIA.
STL	MSY	58-40	J45 J71 MEM J35 MSY.
STL	PDX	43-2-12	J45 J80 MCI J24 SLN J102 J17 DEN J116 EKR J173 SLC J15 PDX.
STL	PHL	15-13	J134 FLM J24 CRW J8 RBV EWR PHL.
STL	PIT	15-39B	J134 FLM J24 J91 AIR PIT.
STL	RNO	43-2-22A-57.	J45 J80 MCI J24 SLN J102 ALS J64 FMN J110 BLD J92 RNO.
STL	SAN	18	J19 LVS J18 SAN.
STL	SAT	18-42-42A	J19 BUM J25 SAT.
STL	SEA	43-2-12-45.	J45 J80 MCI J24 SLN J102 J17 DEN J116 EKR J173 SLC J15 PDX J1 SEA.
STL	SFO	43-2-22A-B-45.	J45 J80 MCI J24 SLN J102 ALS J64 FMN J110 OAK SFO.
STL	SLC	43-2-12	J45 J80 MCI J24 SLN J102 J17 DEN J116 EKR J173 SLC.
STL	SYR	15-39-7-J29.	J134 FLM J24 J83 CLE J545 XU J547 BUF J29 SYR.
STL	TPA	58-38	J45 BNA J73 TLH J43 PIE TPA.
MCI	ATL	15-58-38-3.	J24 STL J45 BNA J73 J66 RMG ATL.
MCI	BAL	15-13	J24 STL J134 FLM J24 CRW J8 CSN Direct BAL.
MCI	BOS	15-53-7	J24 STL J134 FLM J24 CRW J78 PSB J49 ALB J16 BOS.
MCI	CLE	15-39	J24 STL J134 FLM J24 J83 CLE.
MCI	DTW	15-35-9-7A-CRL-Direct.	J24 J105 J94 OBK J584 CRL DTW.
MCI	EWR	15-13	J24 STL J134 FLM J24 CRW J8 RBV EWR.
MCI	IAD	15-13	J24 STL J134 FLM J24 CRW J8 CSN IAD.
MCI	IAH	42	J25 DFW J87 IAH.
MCI	LAS	2-22A	J24 SLN J102 ALS J64 FMN J110 BLD LAS.
MCI	LAX	J26-18-18A-10.	J26 ICT J19 LVS J8 INW J96 PRC J10 TNP J4 J64 LAX.
MCI	LGA	15-13	J24 STL J134 FLM J24 CRW J8 RBV LGA.
MCI	MIA	15-58-38-8.	J24 STL J45 BNA J73 TLH J45 PIE SRQ J58 BSY MIA.
MCI	MSY	15-58-40	J24 STL J45 J71 MEM J35 MSY.

From—	To—	Coded route	Route
MCI	PDX	2-12	J24 SLN J102 J17 DEN J116 EKR J173 SLC J15 PDX.
MCI	PHL	15-13	J24 STL J134 FLM J24 CRW J8 EWT PHL.
MCI	PIT	15-39B	J24 STL J134 FLM J24 J91 AIR PIT.
MCI	SAN	J26-18	J26 ICT J19 LVS J18 SAN.
MCI	SEA	2-12-45	J24 SLN J102 J17 DEN J116 EKR J173 SLC J15 PDX J1 SEA.
MCI	SFO	2-22A-8-45.	J24 SLN J102 ALS J64 FMN J110 OAK SFO.
MCI	SLC	2-12	J24 SLN J102 J17 DEN J116 EKR J173 SLC.
ICT	ATL	Direct-TUL-[illegible]	Direct TUL J46 J41 MEM J66 RMG ATL.
Kansas City ARTCC LR-II.			
ICT	ORD	37-1	J21 PWE J64 BDF J18 JOT ORD.
MCI	ABQ	42-18	BUM J19 LVS J18 ABQ.
MCI	CMH	15-39	J24 STL J134 J83 CMH.
MCI	PHX	42-18	BUM J19 LVS J18 PHX.
STL	ABQ	18	J19 LVS J18 ABQ.
STL	DEN	43-4	J45 J60 DEN.
STL	PHX	18	J19 LVS J18 PHX.
STL	TUS	18-54-10	J19 LVS J104 SSO TUS.
Houston ARTCC			
AUS	ATL	17-19-[illegible]-33.	Direct LAH J2 LCH J22 J4 MGM J40 J89 ATL.
AUS	IAD	Direct-IAH-17.	Direct IAH J2 LCH J22 GVE IAD.
HOU	LAS	10-47-57	J86 JCT J15 INK J4 J11 PRC J92 BLD LAS.
HOU	MIA	5	J37 PEKON J86 SRQ J58 [illegible] MIA.
HOU	PHX	10-47	J86 JCT J15 INK J4 J11 PHX.
HOU	STL	25-3A	J33 DFW J105 SFG J8 STL.
HOU	TUS	10-SSO-J104.	J86 JCT J15 INK J4 SSO J104 TUS.
IAH	ATL	17-19-19A-33.	J2 LCH J22 MEI J20 MGM J40 J89 ATL.
IAH	BAL	17	J2 LCH J22 GVE BAL.
IAH	BOS	17-39-13-53-7.	J2 LCH J22 TYS J91 J6 J78 PSB J49 ALB J16.
IAH	CLE	17-39	J2 LCH J22 TYS J91 J83 [illegible]
IAH	CLT	17-17B	J2 LCH J22 CHA J118 SPA [illegible] Direct.
IAH	CVG	17-59	J2 LCH J22 TYS J43 FLM Direct.
IAH	DEN	35-12	J33 DFW J58 AMA J17 DEN.
IAH	DTW	35-9-7A	J33 DFW J105 J94 OBK J584 CRL DTW.
IAH	EWR	17-31-PLUME-Direct.	J2 LCH J22 GVE J150 J55 SIE J121 PLUME EWR.
IAH	FLL	5	IAH HUB J37 PEKON J86 SRQ J58 BSY FLL.
IAH	IAD	17	J2 LCH GVE IAD.
IAH	JFK	17-31-PLUME-Direct.	J2 LCH J22 GVE J150 J55 SIE J121 PLUME EWR.
IAH	LAS	10-47-57	J86 JCT J15 INK J4 J11 PRC J92 BLD LAS.
IAH	LAX	10	J86 JCT J15 INK J4 J64 LAX.
IAH	LGA	17-31-PLUME-Direct.	J2 LCH J22 GVE J150 J55 SIE J121 PLUME LGA.
IAH	MCI	55-SFG J41.	J35 DFW J105 SGF J41 MCI.
IAH	MCO	5-SRQ-TPA-55.	IAH HUB J37 PEKON J86 SRQ PIE J103 MCO.
IAH	MIA	5	HUB J37 PEKON J86 SRQ J58 BSY MIA.
IAH	ORD	35-1	J33 DFW J105 SGF J18 JOT Direct ORD.
IAH	PHL	17-31-SIE-Direct.	J2 LCH J22 GVE J150 MARBY J55 SIE Direct PHL.
IAH	PHX	10-47	J86 JCT J15 INK J4 J11 [illegible]
IAH	PIT	17-39B	J2 LCH J22 TYS J91 AIR Direct PIT.
IAH	SAN	10-18	J86 JCT J15 INK J4 J18 [illegible] SAN.
IAH	SDF	17-39	J2 LCH J22 CHA J22 J89 SDF.
IAH	SEA	35-12	J33 DFW J58 AMA J17 DEN J116 EKR J173 SLC J15 PDX J1 SEA.
IAH	SFO	10-51-8-45.	J86 JCT J15 INK J4 EWM J86 J13 TCS J108 INW J86 BLD J110 OAK SFO.
IAH	STL	35-3A	J33 DFW J105 SGF J98 STL.
IAH	TPA	5-SRQ-Direct.	HUB J37 PEKON J86 SRQ [illegible] TPA.
MSY	BAL	43-17	J35 MCB J22 GVE J37 MARBY BAL.
MSY	BOS	43-17-39-13-53-7.	J35 MCB J22 TYS J91 J6 CRW J78 PSB J49 ALB J16 BOS.
MSY	DEN	8-12	J58 AMA J17 DEN.
MSY	DTW	43-17-39-[illegible]	J35 MCB J22 TYS J91 J83 CLE J34 DTW.
MSY	EWR	17-31-PLUME-Direct.	J35 MCB J22 GVE J150 J55 SIE J121 PLUME EWR.
MSY	FLL	17A-5	J55 J86 SRQ J58 BSY FLL.
MSY	IAD	43-17	J35 MCA J22 GVE IAD.
MSY	JFK	17-31-PLUME-Direct.	J35 MCB J22 GVE J150 J55 SIE J121 PLUME JFK.
MSY	LAS	10-47-57	J37 J86 JCT J15 INK J4 J11 PRC J92 BLD LAS.
MSY	LAX	10	J37 J86 JCT J15 INK J4 J64 LAX.
MSY	LGA	43-17-31-PLUME-Direct.	J35 MCB J22 GVE J150 J55 SIE J121 PLUME LGA.
MSY	MCI	43-2	J35 STL J45 J80 MCI.
MSY	MIA	17A-5	J55 J86 SRQ J58 BSY MIA.
MSY	ORD	43-35-1	J35 STL J45 J105 BDF J18 JOT ORD.
MSY	PHL	43-17-31-SIE-Direct.	MSY J35 MCB J22 GVE J150 MARBY J55 SIE PHL.
MSY	PIT	43-17-39B	J35 MSB J22 TYS J91 BELAIR Direct PIT.
MSY	SFO	34-10-51-8-45.	J37 J86 JCT J15 INK J4 EWM J86 J13 TCS J108 INW J86 BLD J110 OAK SFO.
MSY	STL	43	J35 STL.
SAT	ABQ	37-10-51	J23 J86 JCT J15 INK J4 EWM J86 J13 ABQ.
SAT	ATL	17-19-19A-33.	J2 LCH J22 MEI J4 MGM J40 J89 ATL.
SAT	DEN	37-12	J23 J58 AMA J17 DEN.
SAT	LAX	37-10	J23 J86 JCT J15 INK J4 J64 LAX.
SAT	ORD	37-13-35-1.	J23 J4 DFW J105 BDF J18 JOT ORD.
SAT	PHX	37-10-47	J23 J86 JCT J15 INK J4 J11 PHX.
SAT	SFO	37-10-51-8-45	J23 J86 JCT J15 INK J4 EWM J86 J13 TCS J108 INW J86 BLD J110 OAK SFO.
SAT	STL	37-13-35-[illegible]	J23 J4 DFW J105 SFG J98
Houston ARTCC LR-II			
IAH	JAX	17-19	J2 LCH J22 MEI J4 MGM J20 TLH J2 JAX.
Seattle Center			
EUG	LAX	Direct LMT-46.	LMT J189 AVE J1 LAX.
GEG	DEN	46A-48	J517 J20 DEN.
GEG	LAX	6-46	J90 SEA J189 AVE J1 LAX.
GEG	MSP	46A-7	J517 J16 DPR J32 ABR J70 MSP.
GEG	ORD	46A-7-58-[illegible]	J517 J16 MCW J90 OBK [illegible] ORD.
PDX	BUR	46	J189 AVE J1 BUR.
PDX	DEN	7-48	J16 PDT J20 DEN.
PDX	DFW	7-48	J18 PDT J20 LBL J98 OKC J21 DFW.
PDX	LAS	46-9-52	J189 J80 OAL J92 LAS.
PDX	LAX	46	J189 AVE J1 LAX.
PDX	MCI	7-48-15	J16 PDT J20 DEN J80 MCI.
PDX	ORD	7-58-7A	J16 MCW J90 OBK ORD.
PDX	PHX	46-3-5-5A	J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J18 PHX.
PDX	STL	7-48-15	J16 PDT J20 DEN J80 MCI J24 STL.
[illegible]	ATL	48-3	J20 LBL J98 OKC J78 TUL J46 J41 MEM J66 RMG ATL.
SEA	DEN	48	[illegible] DEN.
SEA	DFW	48	J20 LBL J98 OKC J21 DFW.
SEA	IAD	48-15-13	J20 DEN J80 MCI J24 STL J134 FLM J24 CRW J8 [illegible] IAD.
SEA	IAH	48-42	J20 LBL J98 OKC J21 DFW [illegible] IAH.
SEA	JFK	48-7-58-7A-1.	J20 PDT J16 MCW J90 OBK J584 CRL J34 J146 [illegible] JFK.
SEA	LAS	46-9-52	J189 J80 OAL J92 LAS.
SEA	LAX	46	J189 AVE J1 LAX.
SEA	MCI	48-15	J20 DEN J80 MCI.
SEA	MSP	48-3	J20 LBL J98 OKC J78 TUL J46 J41 MEM [illegible]
SEA	MSP	48-7	J20 PDT J16 DPR J32 ABR J70 MSP.
SEA	ORD	48-7-58-7A.	J20 PDT J16 MCW J90 OBK ORD.
SEA	SAN	46	J189 AVE J1 SAN.
SEA	STL	48-15	J20 DEN J80 MCI J24 STL
Seattle ARTCC LR-II			
GEG	SFO	46-4	J90 SEA J189 LIN J84 OAK.
PDX	SLC	7-48-44	J16 PDT J20 SLC 360° r SLC.
SEA	BIL	48-7	J20 PDT J16 BIL.
SEA	OAK	46-4	J189 LIN J84 OAK.
SEA	SFO	46-4	J189 LIN J84 OAK SFO.
SEA	SJC	46-LIN Direct.	J189 LIN SJC.
SEA	SLC	48-44	J20 SLC 360°R SLC.
SEA	SMF	46	J189 J7 SMF.
Salt Lake Center			
BIL	ORD	7-58-7A	J16-MCW J90 OBK ORD.
BOI	LAX	[illegible]	J7 LIN J189 AVE J1 LAX.
BOI	ORD	49-7-58-7A.	J7 HIE J16 MCW J90 OBK ORD.
SLC	ATL	21-48-3-J154	RKS J20 LBL J98 OKC J78 TUL J46 J41 MEM J66 RMG ATL.
SLC	DFW	21-48-J154.	RKS J20 LBL J98 OKC J21 DFW.
SLC	JFK	21-48-9-7A-1.	J154 RKS J20 J148 ONL J94 OBK J94 OBK J584 CRL J34 J146 JFK.
SLC	MCI	21-48-15	J154 RKS J20 DEN J80 MCI.
SLC	MSP	21-51A-7	J154 RKS J202 CPR J158 ABR J70 MSP.
SLC	ORD	21-48-9	J154 RKS J20 J148 ONL J94 OBK ORD.
SLC	STL	21-48-15	J154 RKS J20 DEN J80 MCI J24 STL.
Salt Lake Center LR-II			
BIL	MSP	7	J16 DPR J32 ABR J70 MSP.
BIL	SEA	51-6	J13 J90 SEA.
BOI	DEN	49-48	J7 J20 DEN.
SLC	BUR	44-2	J11 J64 LAX BUR.
SLC	LAX	44-2	J11 J64 LAX.
SLC	OAK	12-24-4	J15 J158 MVA J84 OAK.
SLC	ONT	44-2	J11 J64 LAX.
SLC	SAN	44-18	J11 PHX J18 SAN.
SLC	SEA	12-46	J15 PDX J1 SEA.
SLC	SFO	12-24-4	J15 J158 MVA J84 OAK SFO.
SLC	SJC	12-24-4-LIN Direct.	J15 J158 MVA J84 LIN SJC.
SLC	SMF	12-24-4-LIN Direct.	J15 J158 MVA J84 LIN SMF.
SLC	PDX	12	J15 PDX.
Jacksonville ARTCC			
CAE	JFK	55B-55c-31-PLUME-Direct	J51 ORF J121 PLUME JFK.

From—	To—	Coded route	Route
CAE	LGA	55B–55c–31–PLUME–Direct.	J51 ORF J121 PLUME LGA.
CHS	JFK	55–31–PLUME–Direct.	J121 PLUME JFK.
DAB	LGA	55–31–PLUME–Direct.	J103 STARY J121 PLUME LGA.
JAX	DFW	26–8	J2 CEW J50 AEX J58 DFW.
JAX	JFK	55–31–PLUME–Direct.	J103 STARY J121 PLUME JFK.
JAX	LGA	55–31–PLUME–Direct.	J103 STARY J121 PLUME LGA.
JAX	ORD	26–33	J2 J89 ORD.
JAX	PHL	55–31–SIE–Direct.	J103 STARY J121 SIE PHL.

Jacksonville ARTCC LR-II

JAX	DCA	55A–55B	J121 STARY J103 J57 CAE J52 RIC Direct DCA.
JAX	IAH	26–40A	J2 CEW J50 J180 IAH.
CAE	MIA	36–3	J75 J45 JAX J53 BSY MIA.

Fort Worth ARTCC

DFW	ATL	19–19A–33	J4 MGM J40 J89 ATL.
DFW	BAL	13	J66 LIT J6 CRW J8 BAL.
DFW	BDL	13–53–ALB–Direct.	J66 LIT J6 CRW J78 PSB J49 ALB Direct BDL.
DFW	BHM	19–17	J4 MEI J22 BHM.
DFW	BOS	13–53–7	J66 LIT J6 CRW J78 PSB J49 ALB J16 BOS.
DFW	CLE	35–1	J105 BDF J18 JOT J146 J34 CLE.
DFW	CLT	19–17–17B	J4 J22 CHA J118 SPA CLT.
DFW	CMH	35–3A–15–39.	J105 SGF J8 STL J134 FLM J24 J83 CMH.
DFW	COS	12	J58 AMA J17 COS.
DFW	CVG	35–3A–15	J105 SGF J8 STL J134 FLM CVG.
DFW	DAY	35–3A–15–SF	J105 SGF J8 STL J134 FLM J43 DAY.
DFW	DEN	12	J58 AMA J17 DEN.
DFW	DTW	35–9–7A	J105 J84 OBK J584 CRL DTW.
DFW	EWR	13	J66 LIT J6 CRW J8 RBV EWR.
DFW	FLL	42–5	J87 IAH–HUB J37 PEKON J86 SRQ J58 BSY FLL.
DFW	GSO	19–17–17B	J4 MEI J22 CHA J118 SPA J14 GSO.
DFW	IAD	13	J66 LIT J6 CRW J8 CSN IAD.
DFW	IND	35–3A–15–80	J105 J8 STL J134 J89 IND.
DFW	JAX	19	J4 MGM J20 TLH J2 JAX.
DFW	JFK	13	J66 LIT J6 CRW J8 RBV JFK.
DFW	LAS	14–8	J4 ABI J65 TCS J108 INW J86 BLD LAS.
DFW	LAX	14–10	J4 J64 LAX.
DFW	LGA	13	J66 LIT J6 CRW J8 RBV LGA.
DFW	MCO	42–5–SRQ–TPA–55.	J87 IAH HUB J37 PEKON J86 SRQ–TPA J103 MCO.
DFW	MIA	42–5	J87 IAH HUB J37 PEKON J86 SRQ J58 BSY–MIA.
DFW	MKE	35	J105 BAE–MKE.
DFW	MLI	55–BDF–Direct.	J105 BDF Direct MLI.
DFW	MSP	12–37	J58 J23 OKC J21 MSP.
DFW	ONT	14–10	J4 J64 ONT.
DFW	ORD	35–1	J105 BDF J18 JOT ORD.
DFW	PDX	12	J58 AMA J17 DEN J116 EKR J173 SLC J15 PDX.
DFW	PHL	13	J66 LIT J6 CRW J8 EWT PHL.
DFW	PIT	13–39B	J66 LIT J6 J91 AIR PIT.
DFW	PSP	14–10–J74	J4 J74 PSP.
DFW	RDU	19–19A–55A–55B.	J4 MGM J40 J51 RDU.
DFW	RNO	8–57	J4 ABI J65 TCS J108 INW J86 BLD J92 RNO.
DFW	SAN	14–10–18	J4 J18 SAN.
DFW	SDF	13–33	J66 LIT J6 J89 SDF.
DFW	SEA	12–45	J58 AMA J17 DEN J116 EKR J173 SLC J15 PDX J1 SEA.
DFW	SFO	14–8–45	J4 ABI J65 TCS J108 INW J86 BLD J110 OAK SFO.
DFW	SJC	14–8–45	J4 ABI J65 TCS J108 INW J86 BLD J110 SNS SJC.
DFW	SLC	12	J58 AMA J17 DEN J116 EKR J173 SLC.
DFW	TPA	42–5–SRQ–Direct.	J87 IAH HUB J37 PEKON J86 SRQ TPA.
OKC	ATL	3	J78 TUL J46 J41 MEM J86 RMG ATL.
OKC	LAX	20–18A–10	J20 J8 INW J96 PRC J10 TNP J4 J64 LAX.
OKC	LGA	3–13	J78 TUL J46 J41 MEM J6 CRW J8 RBV LGA.
OKC	ORD	3–3A–35–1	J78 TUL J96 SGF J105 BDF J18 JOT ORD.
OKC	TPA	48–42–5–SRQ–Direct.	J21 DFW J87 IAH–HUB J37 PEKON J86 SRQ TPA.
TUL	ATL	3	J46 J41 MEM J86 RMG ATL.
TUL	IAD	3–13	J78 TUL J46 J41 J6 CRW J8 CSN IAD.
TUL	LAX	Direct–OKC–20–18A–10.	OKC J20 J8 INW J96 PRC J10 J64 LAX.
TUL	ORD	3A–35–1	J96 SGF J105 BDF J18 JOT ORD.

Fort Worth ARTCC LR-II

DFW	ABQ	12–20–18	J58 J8 LVS J18 ABQ.
DFW	BNA	13	J66 LIT J6 J45 LIT.
DFW	PHX	8–18	J4 TQA J65 TCS J108 SJN J18 PHX.
DFW	TUS	14–10	J4 SSO TUS.
OKC	PHX	20–18	J8 LVS J18 PHX.

Minneapolis Center

MSP	ATL	38–3	J36 BAE J89 OBK J73 J66 RMG ATL.
MSP	BOS	7	J106 GRB J38 ECK HL547 BUF J16 BOS.
MSP	BUF	7	J106 GRB J38 ECK HL547 BUF.
MSP	CLE	7–50	J106 GRB J38 ECK HL547 XU J545 CLE.
MSP	DCA	7–50–7A	J106 GRB J38 ECK HL547 XU J545 CLE J518 EMI DCA.
MSP	DFW	42	J25 DFW.
MSP	EWR	7–50–1	J106 GRB J38 ECK HL547 XU HL545 J146 EWR.
MSP	GEG	6	J70 ABR J90 GEG.
MSP	JFK	7–50–1	J106 GRB J38 ECK HL547 XU HL545 J146 JFK.
MSP	LAS	22–22A	J114 DEN J128 J110 BLD LAS.
MSP	LAX	22–2	J114 DEN J128 TBC J64 LAX.
MSP	LGA	7–50–1	J106 GRB J38 ECK HL547 XU HL545 J146 JFK.
MSP	MEM	42–58–40	J25 DSM J45 J71 MEM.
MSP	MIA	38–36–5	J36 BAE J89 OBK J73 TLN J43 PIE SRQ J58 BSY MIA.
MSP	PHL	7–50–1–MIP–Direct.	J106 GRB J38 ECK HL547 XU HL545 J146 MIP PHL.
MSP	PHX	22–2–44	J114 DEN J128 TBC J64 J11 PHX.
MSP	PIT	7–50–7A	J106 GRB J38 ECK HL547 XU J545 CLE J578 PIT.
MSP	RNO	6–24–4–57	J70 ABR J32 MLD J158 MVA J84 J92 RNO.
MSP	SEA	6	J70 ABR J90 SEA.
MSP	SFO	6–24–4	J70 ABR J32 MLD J158 MVA J84 OAK SFO.
MSP	SLC	6–24–44	J70 ARB J32 SLC 360°R SLC.
MSP	TPA	36	J36 BAE J89 OBK J73 TLH J43 PIE TPA.
MSP	YEG		
OMA	LAX	4–22–2	J60 DEN J128 TBC J64 LAX.
OMA	SLC	4–12	J60 DEN J116 EKR J173 SLC.
OMA	SFO	4	J60 ILC J196 MVA J84 OAK SFO.

Minneapolis Centre LR-II

MSP	BIL	6–MLS–Direct.	J76 ABR J90 MLS DIL.
MSP	DEN	22	J114 DEN.

Cleveland ARTCC

BUF	ATL	6–50–34	J547 XU J545 CLE J85 SPA J37 ATL.
BUF	MCO	6–50–3	J547 XU J545 CLE J85 AMC J45 JAX J53 MCO.
BUF	MEM	60–30–50B–14.	J547 XU J545 CLE J29 ROD J39 BNA J42 MEM.
BUF	MIA	6–50–3	J547 XU J545 CLE J85 AMG J45 JAX J53 BSY MIA.
BUF	MSP	6	J547 ECK J38 GRB J106 MSP.
BUF	PBI	6–50–3	J545 XU J545 CLE J85 AMG J45 JAX J53 270°/PBI PBI.
BUF	STL	6–50–50B–18.	J545 XU J545 CLE J29 ROD J39 J80 STL.
BUF	TPA	6–50–36	J545 XU J545 CLE J85 TAY J75 PIE TPA.
CAK	DEN	Direct–CLE–4.	CLE J60 DEN.
CAK	TPA	50–36	J85 TAY J75 PIE TPA.
CLE	BOS	39–1A–7	J545 J554 JHW J82 ALB J16 BOS.
CLE	DEN	4	J60 DEN.
CLE	DFW	50B–18–42	J29 ROD J39 J80 IND J24 STL J19 BUM J25.
CLE	FLL	50–3	J85 AMG J45 JAX J53 BSY FLL.
CLE	IAH	50B–14	CRL J34 CLE J29 ROD J39 BNA J42 J180 IAH.
CLE	LAS	4–22–22A	J60 DEN J128 J110 BLD LAX.
CLE	LAX	4–22–2	J60 DEN J128 TBC J64 LAX.
CLE	MCI	50B–2	J29 ROD J39 J80 MCI.
CLE	MCO	50–3	J85 AMG J45 JAX J53 ORL MCO.
CLE	MEM	50B–14	J29 ROD J39 BNA J42 MEM.
CLE	MIA	50–3	J85 AMG J45 JAX J53 BSY MIA.
CLE	MSP	39A–39	J34 BAE J70 MSP.
CLE	PBI	50–3	J85 AMG J45 JAX J53 270°/PBI PBI.
CLE	PHX	50B–18	J29 ROD J39 J80 IND J24 STL J19 LVS J18 PHX.
CLE	SAN	50B–18	J29 ROD J39 J80 IND J24 STL J19 LVS J18 SAN.
CLE	SFO	4	J60 ILC J198 MVA J84 OAK SFO.
CLE	TPA	50–36	J85 TAY J75 PIE TPA.
DTW	ATL	7A–50–34	CRL J34 CLE J85 SPA J37 ATL.
DTW	BOS	Direct–CRL–1A–7.	CRL J554 JHW J82 ALB J16 BOS.
DTW	DEN	J43–4	J43 J60 DEN.
DTW	DFW	J43–4–42	J43 J60 J25 DFW.
DTW	FLL	7A–50–3	CRL J34 CLE J85 AMG J45 JAX J53 BSY FLL.
DTW	IAH	7A–50B–14–40A.	CRL J34 CLE J29 ROD J39 BNA J42 J180 IAH.
DTW	LAS	J43–4–22–22A.	J43 J60 DEN J128 J110 BLD LAS.
DTW	LAX	J43–4–22–2	J43 J60 DEN J128 TBC J64 LAX.
DTW	MCI	7A–50B–2	CRL J34 CLE J29 ROD J39 J80 MCI.
DTW	MCO	7A–50–3	CRL J34 CLE J85 AMG J45 JAX J53 ORL MCO.
DTW	MEM	7A–50B–14	CRL J34 CLE J29 ROD J39 BNA J42 MEM.
DTW	MIA	7A–50–3	CRL J34 CLE J85 AMG J45 JAX J53 BSY MIA.
DTW	MSY	7A–50B–14–40.	CRL J34 CLE J29 ROD J39 BNA J42 MEM J35 MSY.
DTW	PBI	7A–50–3	CRL J34 CLE J85 AMG J45 JAX J53 270°/PBI PBI.
DTW	PHX	Direct–CRL–J43–4–40–18.	CRL J43 J60 J71 J24 STL J19 LVS J18 PHX.
DTW	SFO	J43–4	J43 J60 ILC J198 MVA J84 OAK SFO.
DTW	SRQ	7A–50–36	CRL J34 CLE J85 TAY J75 PIE SRQ.

From—	To—	Coded route	Route
DTW	TPA	7A-50-36	CRL J34 CLE J85 TAY J75 PIE TPA.
MBS	DEN	6-22	J38 GRB J106 MSP J114 DEN.
PIT	BHM	50A-50-34-20.	J145 CRW J85 SPA J37 ATL J52 BHM.
PIT	DEN	Direct-EWC-Direct-CLE-4.	EWC-CLE J60 DEN.
PIT	DFW	50A-2-18-42.	J145 J80 IND J24 STL J19 BUM J25 DFW.
PIT	FLL	50A-50-3	J145 CRW J85 AMG J45 JAX J53 BSY FLL.
PIT	FMY	50A-50-36-5.	J145 CRW J85 TAY J75 PIE-SRQ J58 FMY.
PIT	IAH	50A-50-14-40A.	J145 CRW J85 J42 J180 IAH.
PIT	LAS	50A-2-22A	J145 J80 MCI J24 SLN J102 ALS J64 FMN J110 BLD-LAS.
PIT	LAX	50A-2	J145 J80 MCI J24 SLN J102 ALS J64 LAX.
PIT	MCI	50A-2	J145 J80 MCI.
PIT	MCO	50A-50-3	J145 CRW J85 AMG J45 JAX J53 ORL-MCO.
PIT	MEM	50A-50-14	J145 CRW J85 J42 MEM.
PIT	MIA	50A-50-3	J145 CRW J85 AMG J45 JAX J53 BSY-MIA.
PIT	MSP	39A-33	J51 CLE J34 BAE J70 MSP.
PIT	MSY	50A-50-34	J145 CRW J85 SPA J37 MSY.
PIT	PBI	50A-50-3	J145 CRW J85 AMG J45 JAX J53 PBI/270 PBI.
PIT	PHX	50A-2-18	J145 J80 IND J24 STL J19 LVS J18 PHX.
PIT	SFO	Direct-EWC-Direct-CLE-4.	EWC-CLE J60 ILS J198 MVA J84 OAK-SFO.
PIT	SRQ	50A-50-36	J145 CRW J85 TAY J75 PIE-SRQ.
PIT	STL	50A-18	J145 J80 IND-J24 STL.
PIT	TPA	50A-50-36	J145 CRW J85 TAY J75 TPA.
ROC	ATL	6-50-34	BUF J547 XU J545 CLE J85 SPA J37 ATL.
ROC	FLL	6-50-3	BUF J547 XU J545 CLE J85 AMG J45 JAX J53 BSY-FLL.
ROC	MCO	6-50-3	BUF J547 XU J545 CLE J85 AMG J45 JAX J53 ORL MCO.
ROC	MEM	6B-50-50B-14.	BUF J547 XU J545 CLE J29 ROD J39 BNA J42 MEM.
ROC	MIA	6-50-3	BUF J547 XU J545 CLE J85 AMG J45 JAX J53 BSY-MIA.
ROC	TPA	6-50-36	BUF J547 XU J545 CLE J85 TAY J75 TPA.
TOL	DEN	4	J60 DEN.

Washington ARTCC

DCA	BNA	14	J42 BNA.
DCA	HSV	14-Direct-HSV.	J42 BNA HSV.
DCA	MCO	36-3	J37 GVE J75 J45 JAX J53 ORL MCO.
DCA	MEM	14	J42 MEM.
DCA	MIA	Direct RIC ORF 32.	RIC ORF J79 ILM CLB AR1 BSY MIA.
DCA	MKE	16-33	CSN J149 FWA J64 J89 BAE MKE.
DCA	MSP	16-33	CSN J149 FWA J64 J89 BAE J70 MSP.
DCA	ORD	16	CSN J149 FWA J64 J89 ORD.
DCA	PBI	Direct RIC ORF 32.	RIC ORF J79 ILM CLB AR1 PBI/090° PBI.
DCA	STL	18	CSN J149 J80 IND J24 IND.
DCA	TPA	36	J37 GVE J75 PIE TPA.
IAD	AUS	14-42A	CSN J42 DFW J25 AUS.
IAD	DEN	18-2-12	CSN J149 J80 MCI J24 SLN J102 J17 DEN.
IAD	DFW	14	CSN J42 DFW.
IAD	IAH	14-40A	CSN J42 J180 IAH.
IAD	LAX	18-18A-10	CSN J149 J80 IND J24 STL J19 LVS J8 INW J96 PRC J10 TNP J4 J64 LAX.
IAD	MCI	18-2	CSN J149 J80 MCI.
IAD	MIA	Direct RIC ORF 32.	RIC ORF J79 ILM CLB AR1 BSY MIA.
IAD	MSY	36-34	J37 MSY.
IAD	ORD	16	CSN J149 FWA J64 J89 ORD.
IAD	PHX	18	CSN J149 J80 IND J24 STL J19 LVS J18 PHX.
IAD	SAN	18	CSN J149 J80 IND J24 STL J19 LVS J18 SAN.
IAD	SEA	18-2-43-6	CSN J149 J80 J45 ABR J90 SEA.
IAD	SFO	18-18A-4	CSN J149 J64 J89 J60 ILC J198 MVA J84 OAK SFO.
IAD	TUL	18-42	CSN J149 J80 IND J24 STL J19 BUM J25 TUL.
BAL	CMI	14-18 IND Direct.	J42 CSN J149 J80 IND CMI.
BAL	DEN	14-18-2-12.	J42 CSN J149 J80 MCI J24 SLN J102 J17 DEN.
BAL	DFW	14	J42 DFW.
BAL	FLL	Direct RIC ORF 32.	RIC ORF J79 ILM CLB AR1 FLL/090° FLL.
BAL	IAH	14-40A	J42 J180 IAH.
BAL	MCI	14-18-2	J42 CSN J149 J80 MCI.
BAL	MCO	36-3	J37 GVE J75 J45 JAX J53 ORL MCO.
BAL	MEM	14	J42 MEM.
BAL	MIA	Direct RIC ORF 32.	RIC ORF J79 ILM CLB AR1 BSY MIA.
BAL	MSY	36-34	J37 MSY.
BAL	ORD	14-16	J42 CSN J149 FWA J64 J89 ORD.
BAL	STL	14-18	J42 CSN J149 J80 IND J24 STL.
BAL	TPA	36	J37 GVE J75 PIE TPA.
ORF	MEM	Direct RIC GVE 34A-14.	RIC GVE J147 BKW J42 MEM.
ORF	ORD	Direct RIC CSN-16.	RIC CSN J149 FWA J64 J89 ORD.
RIC	MEM	Direct GVE-34A-15.	GVE J147 BKW J42 MEM.
RIC	ORD	Direct CSN-16.	CSN J149 FWA J64 J89 ORD.
RDU	BOS	55C-31	J51 ORF J121 PVD J55 BOS.
RDU	DFW	Direct GSO 34-20-14.	GSO GSO/270° J37 ATL J52 BHM J14 J42 DFW.
RDU	MEM	Direct GSO 34-20-43.	GSO GSO/270° J37 ATL J52 BHM J14 J35 MEM.
RDU	MIA	Direct ILM 32.	ILM CLB AR1 BSY MIA.
RDU	ORD	55B RIC-CSN-16.	J52 RIC CSN J149 FWA J64 J89 ORD.
RDU	TPA	Direct-GSO-36.	GSO J75 PIE TPA.
ROA	ORD	Direct EKN-16.	EKN J149 FWA J64 J89 ORD.
PHF	ORD	Direct RIC-CSN 16.	RIC CSN J149 FWA J64 J89 ORD.

Washington ARTCC LR-11

BAL	ATL	36-34	J37 ATL.
DCA	JAX	36-3	GVE J75 J45 JAX.
RIC	MEM	Direct GVE-34A-14.	GVE J147 BKW J42 MEM.

Miami Center

FLL	ATL	33	J85 LAL J89 ATL.
FLL	BAL	31 ORF RIC 55B.	Direct ZBB AR7 HAH J79 ORF RIC J40 MARBY BAL.
FLL	BDL	31-HTO-Direct.	Direct ZBB AR7 HAH J79 ORF J121 HTO BDL.
FLL	BNA	33-14	J85 LAL J89 J42 BNA.
FLL	BOS	31	Direct ZBB AR7 HAH J79 ORF J121 PVD J55 BOS.
FLL	BUF	55A-39-7	J79 DAB J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
FLL	CLE	55A-39	J79 DAB J103 SAV J51 CAE J47 SPA J83 CLE.
FLL	CMH	55A-39	J79 DAB J103 SAV J51 CAE J47 SPA J83 CMH.
FLL	DFW	10-8	J86 NEPTUNE J58 DFW.
FLL	DTW	55A-39-39A.	J79 DAB J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
FLL	EWR	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME EWR.
FLL	HSV	33-41-BHM Direct.	J85 LAL J89 J20 TLH J41 BHM.
FLL	IAH	10	J86 IAH.
FLL	JFK	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME JFK.
FLL	LAX	10	J86 JCT J15 INK J4 J64 LAX.
FLL	LGA	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME LGA.
FLL	MSY	10-8	J86 NEPTUNE J58 MSY.
FLL	ORD	33	J85 LAL J89 OBK ORD.
FLL	PHL	31 SIE Direct.	Direct ZBB AR7 HAH J79 ORF J121 SIE PHL.
FLL	PIT	65A-39B	J79 DAB J103 SAV J51 CAE J47 SPA J83 J91 AIR PIT.
FLL	ROC	55A-39-7 BUF Direct.	J79 DAB J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF ROC.
FLL	STL	33-41-43	J85 LAL J89 J20 TLH J41 VUZ J151 FAM J35 STL.
FMY	JFK	Direct-LAL 55-31 PLUME Direct.	Direct LAL J75 J103 STARY J121 PLUME JFK.
FMY	ORD	Direct LAL 33.	Direct LAL J89 OBK ORD.
FMY	PIT	Direct LAL 55-55A-39B.	Direct LAL J75 J103 SAV J51 CAE J47 SPA J83 J01 AIR PIT.
MCO	BAL	55-55A-55B.	J103 SAV J57 CAE J52 RIC J40 MARBY BAL.
MCO	BDL	55-31-HTO Direct.	J103 STARY J121 HTO BDL.
MCO	BOS	55-31	J103 STARY J121 PVD J55 BOS.
MCO	BUF	55-55A-39-7.	J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
MCO	CLE	55-55A-39	J103 SAV J51 CAE J47 SPA J83 CLE.
MCO	CMH	55-55A-39	J103 SAV J51 CAE J47 SPA J83 CMH.
MCO	CVG	28-33-39-59.	J103 J89 ATL J91 TYS J43 FLM CVG.
MCO	DCA	55-55A-55B.	J103 SAV J57 CAE J52 RIC J40 MARBY DCA.
MCO	DFW	28-36-8	J103 PIE SRQ J86 NEPTUNE J58 DFW.
MCO	DTW	55-55A-39-39A.	J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
MCO	EWR	55-31 PLUME Direct.	J103 STARY J121 PLUME EWR.
MCO	IAH	55-36-10	J103 PIE SRQ J86 IAH.
MCO	IND	28-33	J103 J89 IND.
MCO	JFK	55-31 PLUME Direct.	J103 STARY J121 PLUME JFK.
MCO	LGA	55-31 PLUME Direct.	J103 STARY J121 PLUME LGA.
MCO	MEM	28-33-41-20-43.	J103 J89 J20 TLH J41 BHM J14 J35 MEM.
MCO	MSY	28-36-10-8.	J103 PIE SRQ J86 NEPTUNE J58 MSY.
MCO	ORD	28-33	J103 J89 OBK ORD.
MCO	PHL	55-31 SIE Direct.	J103 STARY J121 SIE PHL.
MCO	PIT	55-55A-39B.	J103 SAV J51 CAE J47 SPA J83 J91 AIR PIT.
MCO	ROC	55-55A-39-7.	J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF ROC.
MCO	SDF	28-33	J103 J89 SDF.
MCO	STL	28-33-41-43.	J103 J89 J20 TLH J41 VUZ J151 FAM J35 STL.
MIA	ATL	33	J85 LAL J89 ATL.
MIA	BAL	31 ORF-RIC 55B.	Direct ZBB AR7 HAH J79 ORF RIC J40 MARBY BAL.
MIA	BDL	31 HTO Direct.	Direct ZBB AR7 HAH J79 ORF J121 HTO BDL.
MIA	BOS	31	Direct ZBB AR7 HAH J79 ORF J121 PVD J55 BOS.

From—	To—	Coded route	Route
MIA	BUF	55A-39-7	J79 DAB J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
MIA	CLE	55A-39	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE.
MIA	CLT	55A-17B	J79 OMN J103 SAV J51 CAE J47 SPA CLT.
MIA	CMH	55A-39	J79 OMN J103 SAV J51 CAE J47 SPA J83 CMH.
MIA	CVG	33-39-59	J85 LAL J89 ATL J91 TYS J43 FLM CVG.
MIA	DCA	31 ORF Direct RIC 55B.	Direct ZBB AR7 HAH J79 ORF RIC J40 MARBY DCA.
MIA	DEN	10-8-12	J86 NEPTUNE J58 AMA J17 DEN.
MIA	DFW	10-8	J86 NEPTUNE J58 DFW.
MIA	DTW	55A-39-39A.	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
MIA	EWR	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME EWR.
MIA	GSO	55A-17B	J79 OMN J103 SAV J51 CAE J47 SPA J14 GSO.
MIA	HOU	10	J86 HOU.
MIA	IAD	31 ORF Direct RIC 55B.	Direct ZBB AR7 HAH J79 ORF RIC J40 MARBY IAD.
MIA	IAH	10	J86 IAH.
MIA	IND	33	J85 LAL J89 IND.
MIA	JFK	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME JFK.
MIA	LAX	10	J86 JCT J15 INK J4 J64 LAX.
MIA	LGA	31 PLUME Direct.	Direct ZBB AR7 HAH J79 ORF J121 PLUME LGA.
MIA	MCI	33-41-43-2.	J85 LAL J89 J20 TLH J41 BHM J151 FAM J35 STL J45 J80 MCI.
MIA	MEM	33-41-20-43.	J85 LAL J89 J20 TLH J41 BHM J14 J35 MEM.
MIA	MKE	33	J85 LAL J89 BAE.
MIA	MSP	33-41-43-37.	J85 LAL J89 J20 TLH J41 BHM J151 FAM J35 STL J45 J21 MSP.
MIA	MSY	10-8	J86 NEPTUNE J98 MSY.
MIA	ORD	33	J85 LAL J89 OBK ORD.
MIA	PHL	31 SIE Direct.	Direct ZBB AR7 HAH J79 ORF J121 SIE PHL.
MIA	PIT	55A-39B	J79 OMN J103 SAV J51 CAE J47 SPA J83 J91 AIR PIT.
MIA	PVD	31	Direct ZBB AR7 HAH J79 ORF J121 PVD.
MIA	RDU	55A-55B	J79 OMN J103 SAV J51 CAE J52 RDU.
MIA	ROC	55A-39-7-BUF Direct.	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF ROC.
MIA	SFO	10-8-45	J86 NEPTUNE J58 DFW J4 TQA J65 TCS J108 INW J86 BLD J110 OAK SFO.
MIA	STL	33-41-43	J85 LAL J89 J20 TLH J41 BHM J15 FAM J35 STL.
PBI	BOS	31	PBI 090°R AR7 HAH J19 ORF J121 PVD J55 BOS.
PBI	BUF	55A-39-7	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
PBI	CLE	55A-39	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE.
PBI	DCA	31 ORF Direct RIC 55B.	PBI 090°R AR7 HAH J79 ORF RIC J40 MARBY DCA.
PBI	DTW	55A-39-39A.	J79 OMN J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
PBI	EWR	31 PLUME Direct.	PBI 090°R AR7 HAH J79 ORF J121 PLUME EWR.
PBI	JFK	31 PLUME Direct.	PBI 090°R AR7 HAH J79 ORF J121 PLUME JFK.
PBI	LGA	31 PLUME Direct.	PBI 090°R AR7 HAH J79 ORF J121 PLUME LGA.
PBI	ORD	33	PBI 270°R J85 LAL J89 OBK ORD.
PBI	PHL	31 SIE Direct.	PBI 090°R AR7 HAH J79 ORF J121 SIE PHL.
PBI	PIT	55A-39B	J79 OMN J103 SAV JAV J51 CAE SPA J83 J91 AIR PIT.
SRQ	DTW	Direct LAL 55-55A-39-39A.	Direct LAL J75 J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
SRQ	EWR	Direct LAL 55-31-PLUME Direct.	Direct LAL J75 J103 STARY J121 PLUME EWR.
SRQ	JFK	Direct LAL 55-31-PLUME Direct.	Direct LAL J75 J103 STARY J121 PLUME JFK.
SRQ	ORD	55-33	Direct LAL J89 OBK ORD.
SRQ	PIT	Direct LAL 55-55A-39B.	Direct LAL J75 J103 SAV J51 CAE J47 SPA J83 J91 AIR PIT.
TPA	BAL	55-55A-55B.	J103 SAV J57 CAE J52 RIC J40 MARBY BAL.
TPA	BDL	55-31-HTO Direct.	J103 STARY J121 HTO BDL.
TPA	BNA	55-33-14	J103 J89 J42 BNA
TPA	BOS	55-31	J103 STARY J121 PVD J55 BOS.
TPA	BUF	55-55A-39-7.	J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
TPA	CAK	55-55A-39-CMH Direct.	J103 SAV J51 CAE J47 SPA J83 CMH CAK.
TPA	CLE	55-55A-39	J103 SAV J51 CAE J47 SPA J83 CLE.
TPA	CMH	55-55A-39	J103 SAV J51 CAE J47 SPA J83 CMH.
TPA	CVG	55-33-39-59.	J103 J89 ATL J91 TYS J43 FLM CVG.
TPA	DCA	55-55A-55B.	J103 SAV J51 CAE J52 RIC J40 MARBY DCA.
TPA	DEN	36-8-12	Direct SRQ J86 NEPTUNE J58 AMA J17 DEN.
TPA	DFW	36-8	Direct SRQ J86 NEPTUNE J58 DFW.
TPA	DTW	55-55A-39-39A.	J103 SAV J51 CAE J47 SPA J83 CLE J34 CRL DTW.
TPA	EWR	55-31 PLUME Direct.	J103 STARY J121 PLUME EWR.
TPA	IAH	10	Direct SRQ J86 IAH.
TPA	IND	55-33	J103 J89 IND.
TPA	JFK	55-31 PLUME Direct.	J103 STARY J121 PLUME JFK.
TPA	LGA	55-31 PLUME Direct.	J103 STARY J121 PLUME LGA.
TPA	MEM	55-33-41-20-43.	J103 J89 J20 TLH J41 BHM J14 J35 MEM.
TPA	MKE	55-33	J103 J89 BAE.
TPA	MSP	55-41-43-37.	J103 J89 J20 TLH J41 BHM J151 FAM J35 STL J45 J21 MSP
TPA	OKC	28-41-20	J103 J89 J20 TLH J41 BHM J14 OKC.
TPA	ORD	55-33	J103 J89 OBK ORD.
TPA	PHL	55-31-SIE Direct.	J103 STARY J121 SIE PHL.
TPA	PIT	55-55A-39B.	J103 SAV J51 CAE J47 SPA J83 J91 AIR PIT.
TPA	RDU	55-55A-55B.	J103 SAV J51 CAE J52 RDU.
TPA	ROC	55-55A-39-7 BUF Direct.	J103 SAV J51 CAE J47 SPA J83 CLE J545 XU J547 BUF.
TPA	SDF	55-33	J103 J89 SDF.
TPA	STL	55-33-41-43.	J103 J89 J20 TLH J41 BHM J151 FAM J35 STL.

Miami Center LR-II

MIA	CAE	55A	J79 OMN J103 SAV J51 CAE.

Atlanta ARTCC

ATL	ABQ	20-18	J52 BHM J14 OKC J20 J8 LVS J18 ABQ.
ATL	AUS	34-10	J37 PEKON J86 AUS.
ATL	BDL	39-17-31	J91 TYS J22 GVE J37 J55 SIE J121 HTO BDL.
ATL	BOS	39-17-31	J91 TYS J22 GVE J37 J55 SIE J121 PVD J55 BOS.
ATL	BUF	39-7	J91 J83 CLE J545 XU J547 BUF.
ATL	DEN	20-12	J52 BHM J14 OKC J20 J8 J17 DEN.
ATL	DFW	20-14	J52 BHM J14 J42 DFW.
ATL	DTW	39-39A-CRL-Direct.	J91 J83 CLE J34 CRL DTW.
ATL	EWR	39-17-31 PLUME Direct.	J91 TYS J22 GVE J37 J55 SIE J121 PLUME EWR.
ATL	FLL	3	J45 JAX J53 FLL/270° FLL.
ATL	IAH	34-10	J37 PEKON J86 IAH.
ATL	ICT	20-41-43-18.	J52 BHM J151 FAM J35 STL J19 ICT.
ATL	JFK	39-17-31 PLUME-Direct.	J91 TYS J22 GVE J37 J55 SIE J121 PLUME JFK.
ATL	LAS	20-18A-8	J52 BHM J14 OKC J20 J8 INW J86 BLD LAS.
ATL	LAX	20-18A-10	J52 BHM J14 OKC J20 J8 INW J96 PRC J10 TNP J4 J64 LAX.
ATL	LGA	39-17-31-PLUME-Direct.	J91 TYS J22 GVE J37 J55 SIE J121 PLUME LGA.
ATL	MCI	20-41-43-2.	J52 BHM J151 FAM J35 STL J45 J80 MCI.
ATL	MIA	3	J45 JAX J53 BSY MIA.
ATL	MKE	33	J89 BAE MKE.
ATL	MSP	20-41-43-37.	J52 BHM J151 FAM J35 STL J45 J21 MSP.
ATL	OKC	20	J52 BHM J14 OKC.
ATL	ORD	33	J89 ORD.
ATL	PHL	39-13	J91 J6 CRW J8 EWT PHL.
ATL	PHX	20-18	J52 BHM J14 OKC J20 J8 LVS J18 PHX.
ATL	PIA	20-41-43-35.	J52 BHM J151 FAM J35 STL J45 J105 PIA.
ATL	PVD	39-17-31	J91 TYS J22 GVE J37 J55 SIE J121 PVD.
ATL	ROC	39-7 BUF Direct.	J91 J83 CLE J545 XU J547 BUF ROC.
ATL	SAT	34-10-42A	J37 PEKON J86 AUS J42 SAT.
ATL	SEA	20-41-43-6.	J52 BHM J151 FAM J35 STL J45 ABR J90 SEA.
ATL	SFO	20-18A-8-45.	J52 BHM J14 OKC J20 J8 INW J86 BLD LAS J110 OAK SFO.
ATL	SLC	20-12	J52 BHM J14 OKC J20 J8 J17 DEN J116 EKR J173 SLC.
ATL	SYR	39-13-53-J63.	J91 J6 CRW J78 PSB J49 HNK J63 SYR.
ATL	TUL	20 STICK-TUL.	J52 BHM J14 STICK TUL.
BHM	DFW	20-14	J14 J42 DFW.
BHM	LAX	20-18A-10	J14 OKC J20 J8 INW J96 PRC J10 TNP J4 J64 LAX.
BHM	LGA	17-31 PLUME Direct.	J22 GVE J37 J55 SIE J121 PLUME LGA.
BHM	ORD	17-33	J22 J89 ORD.
BHM	PIT	17-39B	J22 J91 AIR PIT.
CLT	BDL	Direct GSO 17B-55B-17-31 HTO Direct.	Direct GSO J14 RIC J40 J55 SIE J121 HTO BDL.
CLT	DFW	Direct SPA 50-20-14.	Direct SPA J85 AGS J52 BHM J14 J42 DFW.
CLT	IAH	Direct SPA 34-10.	Direct SPA J37 PEKON J86 IAH.
CLT	MIA	36-3	J75 J45 JAX J53 BSY MIA.
CLT	ORD	Direct SPA 55A-16.	Direct SPA J83 J149 FWA J64 J89 ORD.
CLT	STL	Direct SPA Direct TYS J46 BNA 14-41-43.	Direct SPA TYS J46 BNA J42 J151 FAM J35 STL.
GSO	BOS	17B-55B-17-31.	J14 RIC J40 J55 SIE J121 PVD J55 BOS.
GSO	DFW	34-20-14	J37 ATL J52 BHM J14 J42 DFW.
GSO	MIA	36-3	J75 J45 JAX J53 BSY MIA.
GSO	ORD	Direct SPA 55A-16.	Direct SPA J83 J149 FWA J64 J89 ORD.

Atlanta ARTCC LR-II

ATL	BAL	39-39B-13	J91 J6 CRW J8 CSN BAL.

Indianapolis ARTCC

CMH	BOS	39-7	J83 CLE J545 XU J547 BUF J16 BOS.

From—	To—	Coded route	Route
CMH	DFW	18-42	J80 IND J24 STL J19 BUM J25 DFW.
CMH	FLL	9-50-3	J30 J85 AMG J45 JAX J53 BSY FLL.
CMH	MCO	9-50-3	J30 J85 AMG J45 JAX J53 ORL MCO.
CMH	MIA	9-50-3	J30 J85 AMG J45 JAX J53 BSY MIA.
CMH	TPA	9-50-36	J30 J85 TAY J75 PIE TPA.
CVG	DFW	Direct-LOU-50B-14.	Direct LOU J39 BNA J42 DFW.
CVG	IAH	Direct LOU-50B-14-40A.	Direct LOU J39 BNA J42 J180 IAH.
CVG	LGA	15-13	Direct FLM J24 CRW J8 RBV LGA.
CVG	MCO	15-50-3	Direct FLM J24 CRW J85 AMG J45 JAX J53 ORL MCO.
CVG	MIA	15-50-3	Direct FLM J24 CRW J85 AMG J45 JAX J53 BSY MIA.
CVG	TPA	Direct LOU 50B-36.	Direct LOU J39 BNA J73 TLH J43 PIE TPA.
DAY	DFW	18-42	J39 J80 IND J24 STL J19 BUM J25 DFW.
IND	DFW	18-42	J24 STL J19 BUM J25 DFW.
IND	EWR	J24-CVG-15-13.	J24 CRW J8 RBV EWR.
IND	JFK	J24-CVG-15-13.	J24 CRW J8 RBV JFK.
IND	LAX	2	J80 MCI J24 SLN J102 ALS J64 LAX.
IND	LGA	J24-CVG-15-13.	J24 CRW J8 RBV LGA.
IND	MCO	18-38-55	J24 J73 TLH J43 PIE J103 ORL MCO.
IND	MIA	18-38-3	J24 J73 J66 RMG ATL J45 JAX J53 BSY MIA.
IND	PHL	J24-CVG-15-13.	J24 CRW J8 EWT PHL.
IND	PHX	18	J24 STL J19 LVS J16 PHS.
IND	TPA	18-36	J24 J73 TLH J43 PIE TPA.
SDF	DEN	2-12	J89 J80 NCI J24 SLN J102 J17 DEN.
SDF	DFW	50B-14-20	J39 BNA J42 DFW.
SDF	EWR	Direct FLM-15-13.	Direct FLM J24 CRW J8 RBV EWR.
SDF	IAH	50B-14-40A.	J39 BNA J42 J180 IAH.
SDF	LGA	Direct FLM-15-13.	Direct FLM J24 CRW J8 RBV LGA.
SDF	MCO	50B-36-55	J39 BNA J73 TLH J43 PIE J103 ORL MCO.
SDF	TPA	50B-36	J39 BNA J73 TLH J43 PIE TPA.
CMH	MCI	2	J80 MCI.

Memphis ARTCC

From—	To—	Coded route	Route
BNA	DCA	13	Direct BWG J6 CRW J8 CSN DCA.
BNA	DEN	14-20-12	J42 J14 OKC J20 J8 J17 DEN.
BNA	EWR	13	Direct BWG J6 CRW J8 RBV EWR.
BNA	FLL	36-36-5	J73 TLH J43 PIE SRQ J58 BSY FLL.
BNA	LAX	14-20-18A-10.	J42 J14 OKC J20 J8 PRC J10 J64 LAX.
BNA	LGA	13	Direct BWG J6 CRW J8 RBV LGA.
BNA	PHL	13	Direct BWG J6 CRW J8 EWT PHL.
BNA	TPA	36	J73 TLH J43 PIE TPA.
HSV	DCA	Direct-CHA-17.	Direct CHA J22 GVE DCA.
HSV	LAX	J118-MEM-14-20-18A-10.	J118 MEM J42 J14 OKC J20 J8 PRC J10 J64 LAX.
LIT	DEN	20-12	J14 OKC J20 J8 J17 DEN.
MEM	BAL	43-13	J35 J6 CRW J8 CSN BAL.
MEM	BOS	43-13-57-7.	J35 J6 CRW J78 PSB J49 ALB J16 BOS.
MEM	BUF	43-13-39-7.	J35 J8 J83 CLE J545 XU J547 BUF.
MEM	CLE	43-13-39	J35 J6 J83 CLE.
MEM	DCA	43-13	J35 J6 CRW J8 CSN DCA.
MEM	DEN	14-20-12	J42 J14 OKC J20 J8 J17 DEN.
MEM	DTW	43-13-39-39A.	J35 J6 J83 CLE J83 CLE J34 DTW.
MEM	EWR	48-13	J35 J6 CRW J8 RBV EWR.
MEM	LAS	14-20-18A-8.	J42 J14 OKC J20 J8 INW J86 BLD LAS.
MEM	LAX	14-20-18A-10.	J42 J14 OKC J20 J8 PRC J10 J64 LAX.
MEM	LGA	43-13	J35 J6 CRW J8 RBV LGA.
MEM	MCO	3	J66 RMG ATL J45 JAX J53 ORL MCO.
MEM	MIA	3-36-36-5	J66 J73 TLH J43 PIE SRQ J58 BSY MIA.
MEM	MSP	43-37	J35 STL J45 J21 MSP.
MEM	ORF	3-3B-55B-55C.	J66 RMG ATL J52 RDU J51 ORF.
MEM	PIT	43-13-39B	J35 J6 J91 AIR PIT.
MEM	RDU	3-3B-55B	J66 RMG ATL J52 RDU.
MEM	RIC	3-3B-55B	J66 RMG ATL J52 RIC.
MEM	SAN	14-20-18	J42 J14 OKC J20 J8 LVS J16 SAN.
MEM	SEA	43-6	J35 STL J45 ABR J90 SEA.
MEM	SFO	14-20-18A-8-45.	J42 J14 OKC J20 J8 INW J86 BLD J110 OAK SFO.
MEM	TPA	3-36	J66 J73 TLH J43 PIE TPA.

Memphis ARTCC LR-II

From—	To—	Coded route	Route
BNA	DFW	14	J42 DFW.
MEM	RIC	13-15	J71 J6 CRW J24 RIC.

Boston Center

From—	To—	Coded route	Route
ALB	ORD	Direct-SYR-6B.	Direct SYR J547 OBK ORD.
BDL	ATL	36-34	J48 JFK J37 ATL.
BDL	DFW	Direct CTR-J68-HNK 56-50-14.	Direct CTR J68 HNK J49 PSB J78 CRW J85 J42 DFW.
BDL	FLL	36-32	J48 JFK J37 CYN J79 ILM CLB AR1 O90°/FLL FLL.
BDL	MCO	36-3	J48 JFK J37 GVE J75 J45 JAX J53 MCO.
BDL	MIA	36-32	J48 JFK J37 CYN J79 ILM CLB AR1 BSY MIA.
BDL	ORD	Direct ALB-Direct SYR-6B.	Direct ALB SYR J547 OBK ORD.
BDL	TPA	36	J48 JFK J37 GVE J75 PIE TPA.
BOS	ATL	36-34	J48 JFK J37 ATL.
BOS	CLE	6B-50	J97 J547 XU J545 CLE.
BOS	CMH	Direct CTR-J68-HNK-56-2.	Direct CTR J68 HNK J49 PSB J78 J80 AIR CMH.
BOS	DEN	6B-6-22	J97 J547 ECK J38 GRB J106 MSP J114 DEN.
BOS	DFW	Direct-CTR-J68-HNK-56-50-14.	Direct CTR J68 HNK J49 PSB J78 CRW J85 J42 DFW.
BOS	DTW	6B-ECK-Direct.	J97 J547 ECK DTW.
BOS	FLL	36-32	J48 JFK J37 CYN J79 ILM CLB AR1 FLL/090° FLL
BOS	GSO	36	J48 JFK J37 GVE J75 GSO.
BOS	IAH	Direct-CTR-J68-56-50-14-40A.	Direct CTR J68 HNK J49 PSB J78 CRW J85 J42 J180 IAH.
BOS	LAX	6B-6-22-2-10.	J79 J547 ECK J38 GRB J106 MSP J114 DEN J128 TBC J64 LAX.
BOS	MCI	Direct-CTR-J68-56-2.	Direct CTR J68 HNK J49 PSB J78 J80 MCI.
BOS	MCO	36-3	J48 JFK J37 GVE J75 J45 JAX J53 ORL MCO.
BOS	MEM	Direct CTR-J68-56-50-14.	Direct CTR J68 HNK J49 PSB J78 CRW J85 J42 MEM.
BOS	MIA	36-32	J48 JFK J37 CYN J79 ILM CLB AR1 BSY MIA.
BOS	MKE	6B-39A	J97 J547 J34 BAE MKE.
BOS	MSP	6B-6	J97 J547 ECK J38 GRB J106 MSP.
BOS	MSY	Direct-CTR-J68-55-50-34.	Direct CTR J68 HNK J49 PSB J78 CRW J85 SPA J37 MSY.
BOS	ORD	6B	J97 J547 OBK ORD.
BOS	PBI	36-32	J48 JFK J37 CYN J79 ILM CLB AR1 PBI/090° PBI.
BOS	RDU	36-32-ORF-55C-RDU.	J48 JFK J37 CYN J79 ORF J51 RDU.
BOS	SFO	6B-6-24-4	J97 J547 ECK J38 GRB J106 MSP J70 ABR J32 MLD J158 MVA J84 OAK SFO.
BOS	STL	Direct CTR-J68-56-2-18.	Direct CTR J68 HNK J49 PSB J78 J80 IND J24 STL.
BOS	TPA	36	J48 JFK J37 GVE J75 PIE TPA.
BOS	BDA	International.	
BOS	SJU		
BOS	FRA		
BOS	YHZ		
BOS	CDG		
BOS	AMS		
BOS	TER		
BOS	LHR		
BOS	PIK		
BOS	ZRH		
BOS	MXP		
BOS	SNN		
PVD	ATL	Direct HFD 36-34.	Direct HFD J48 JFK ATL.
PVD	MIA	Direct HFD 36-32.	Direct HFD J48 JFK J37 CYN J79 ILM CLB AR1 BSY MIA.
PVD	ORD	Direct CTR-Direct ALB-Direct SYR-6B.	Direct CTR ALB SYR J547 OBK ORD.
SYR	ATL	J63 HNK-56-50-34.	J63 HNK J49 PSB J78 CRW J85 SPA J37 ATL.
SYR	ORD	6B	J547 OBK ORD.
SYR	STL	J63-HNK-56-2-18.	J63 HNK J49 PSB J78 J80 IND J24 STL.

Los Angeles ARTCC

From—	To—	Coded route	Route
LAX	ATL	3	Direct SNA J78 TUL J46 J41 MEM J66 RMG ATL.
LAX	BHM	3-MEM-J41.	Direct SNA J78 TUL J46 J41 BHM.
LAX	BNA	3-13-J46	Direct SNA J78 TUL J46 J41 J6 J46 BNA.
LAX	BOI	45-49	J88 SNS OAK J7 BOI.
LAX	BOS	1-11-9-78-7.	J146 GUC J10 DEN J114 ONL J94 FOD J132 MCW J16 ECK J547 BUF J16 BOS.
LAX	CLE	1-7A	J146 GDC J192 PWE J64 BDF J18 JOT J146 J34 CLE.
LAX	DFW	3-5-13	SNA J78 PSP J169 BLH J50 GBN J2 ELP J50 TQA J4 DFW.
LAX	DSM	1-PWE Direct.	J146 GLD J199 PWE DSM.
LAX	DTW	1-11-9-7A	J146 GLD J10 DEN J114 ONL J94 OBK J584 CRL DTW.
LAX	EUG	45	J88 SNS J110 OAK J1 MFR EUG.
LAX	EWR	1	J146 GLD J192 PWE J64 BDF J18 JOT J146 EWR.
LAX	FLL	3-5	SNA J78 PSP J169 SLH J50 GBN J2 FST J138 HUB J37 PEKON J86 SRQ J58 BSY FLL.
LAX	GEG	45-7-12A	J88 SNS J110 OAK J1 PDX J16 J517 PDX.
LAX	HSV	3-MEM-Direct.	J78 TUL J46 J41 MEM HSV.
LAX	IAD	1-15-13	J146 GLD J80 MCI J24 STL J134 FLM J24 CRW J8 CSN IAD.

From—	To—	Coded route	Route
LAX	IAH	3-5-17	SNA J78 PSP J169 BLH J50 GBN J2 FST J138 SAT J2 IAH.
LAX	IND	1-15-33	J146 GLD J80 MCI J24 STL J134 J89 IND.
LAX	JFK	1	J146 GLD J192 PWE J64 BDF J18 JOT J146 JFK.
LAX	MCI	1-15	J146 GLD J80 MCI.
LAX	MEM	3	J78 TUL J46 J41 MEM.
LAX	MIA	3-5	SNA J78 PSP J169 BLH J50 GBN J2 FST J138 SAT PEKON J86 SRQ J58 BSY MIA.
LAX	MKE	1-11-9-78	J146 GUC J10 DEN J114 ONL J94 FOD J132 MCW J16 BAE MKE.
LAX	MSP	1-11	J146 GUC J10 DEN J114 MSP.
LAX	MSY	3-5-17-17A.	SNA J78 PSP J169 BLH J50 GBN J2 FST J138 SAT J2 MSY.
LAX	OKC	3	J78 OKC.
LAX	OMA	1-37	J146 GLD J192 PWE J21 OMA.
LAX	ORD	1	J146 GLD J129 PWE J64 BDF J18 JOT OBK ORD.
LAX	PDX	45	J88 SNS J110 OAK J1 PDX.
LAX	PHL	1-MIP Direct.	J146 GLD J192 PWE J64 BDF J18 JOT J146 MIP PHL.
LAX	PIT	1-7A	J146 GLD J192 PWE J64 BDF J18 JOT J146 J34 CLE J518 PIT.
LAX	SAT	3-5	SNA J78 PSP J169 BLH J50 GBN J2 FST J138 SAT.
LAX	SEA	45	J88 SNA J110 OAK J1 SEA.
LAX	STL	1-15	J146 GLD J80 MCI J24 STL.
LAX	TPA	3-5-SRQ Direct.	SNA J78 PSP J169 BLH J50 GBN J2 FST J138 HUB J37 PEKON J86 SRQ TPA.
LAX	TUL	3	J78 TUL.
ONT	DFW	3-5-13	J78 PSP J169 BLH J50 GBN J2 ELP J50 TQA J4 DFW.
ONT	ORD	1	Direct DAG J146 GLD J129 PWE J64 BDF J18 JOT OBK ORD.
LAS	ATL	52-3	Direct BLD J92 PRC J78 TUL J46 J41 MEM J66 RMG ATL.
LAS	CLE	1-7A	J146 GLD J192 PWE J64 BDF J18 JOT J146 J34 CLE.
LAS	DFW	52-3-48	Direct BLD J92 PRC J78 OKC J21 DFW.
LAS	DTW	1-11-9-7A	J146 GUC J10 DEN J114 ONL J94 OBK J584 CRL DTW.
LAS	EWR	1	J146 GLD J192 PWE J64 BDF J18 JOT J146 EWR.
LAS	HOU	52-44-5-17.	Direct BLD J92 PRC J11 J2 FST J138 SAT J2 HOU.
LAS	IAH	52-44-5-17.	Direct BLD J92 PRC J11 J2 FST J138 SAT J2 IAH.
LAS	JFK	1	J146 GLD J192 PWE J64 BDF J18 JOT J146 JFK.
LAS	MCI	1-15	J146 GLD J80 MCI.
LAS	MEM	52-3	Direct BLD J92 PRC J78 TUL J46 J41 MEM.
LAS	MSP	1-11	J146 GUC J10 DEN J114 MSP.
LAS	MSY	52-44-5-17-17A.	Direct BLD J92 PRC J11 J2 FST J138 SAT J2 MSY.
LAS	ORD	1	J146 GLD J192 PWE J64 BDF J18 JOT OBK ORD.
LAS	PDX	8-45	J110 OAK J1 PDX.
LAS	PIT	1-7A	J146 GLD J192 PWE J64 BDF J18 JOT J146 J34 CLE J518 PIT.
LAS	SEA	8-45	J110 OAK J1 SEA.
LAS	STL	1-15	J146 GLD J80 MCI J24 STL.
SAN	CLE	5A-3-3A-35-1-7A.	J18 PHX J19 ZUN J78 TUL J98 SGF J105 BDF J18 JOT J146 J34 CLE.
SAN	DFW	5A-5-13	J18 GBN J2 ELP J50 INK J4 DFW.
SAN	IAD	5A-5-13	J18 GBN J2 ELP J50 TQA J4 DFW J66 LIT J6 CRW J8 CSN IAD.
SAN	IAH	5A-5-17	J18 GBN J2 FST J138 SAT J2 IAH.
SAN	JFK	5A-5-13	J18 GBN J2 ELP J50 TQA J4 DFW J66 LIT J6 CRW J8 RBV JFK.
SAN	MCI	5A-3-37-15.	J18 PHX J19 ZUN J78 OKC J21 J80 MCI.
SAN	MEM	5A-3	J18 PHX J19 ZUN J78 TUL J46 J41 MEM.
SAN	ORD	5A-3-3A-35-1.	J18 PHX J19 ZUN J78 TUL J98 SGF J105 BDF J18 JOT OBK ORD.
SAN	PDX	45	J1 LAX J110 OAK J1 PDX.
SAN	SEA	45	J1 LAX J110 OAK J1 SEA.
SAN	STL	5A-3-3A	J18 PHX J19 ZUN J78 TUL J98 SGF J8 STL.
BUR	PDX	45	J110 OAK J1 PDX.
PSP	DFW	5-13	J169 BLH J50 GBN J2 ELP J50 TQA J4 DFW.
PSP	ORD	3-3A-35-1	J169 BLH J78 TUL J98 SGF J105 BDF J18 JOT OBK ORD.

Los Angeles ARTCC LR-II

From—	To—	Coded route	Route
LAX	ABQ	3	SLI J78 ABQ.
LAX	DEN	1-11	J146 GUC J10 DEN.
LAX	ELP	3-5	SLI J78 TRM J169 BLH J50 GBN J2 ELP.
LAX	SLC	1-47	J146 J11 SLC.
SAN	DEN	5A-3-51	J18 PHX J19 ZUN J78 ABQ J13 DEN.
SAN	ELP	5A-5	J18 GBN J2 ELP.
SAN	SLC	5A-47	J18 PHX J11 SLC.
BUR	DEN	1-11	J146 GUC J10 DEN.
BUR	SLC	1-47	J146 J11 SLC.
ONT	DEN	1-11	DAG J146 GUC J10 DEN.
ONT	SLC	1-47	DAG J146 J11 SLC.
LAS	DEN	1-11	J146 GUC J10 DEN.

Oakland Center

From—	To—	Coded route	Route
FAT	DEN	Direct OAL-9-48.	Direct OAL J148 J20 DEN.
FAT	ORD	Direct OAL-9.	Direct OAL J148 ONL J94 OBK ORD.
MRY	ORD	9	Direct OAK J80 OAL J148 ONL J94 OBK ORD.
OAK	DEN	9-48	J80 OAL J148 J20 DEN.
OAK	ORD	9	J80 OAL J148 ONL J94 OBK ORD.
OAK	PHX	9-46-3-5-5A.	J80 J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J18 PHX.
RNO	DEN	52-9-48	J92 OAL J148 J20 DEN.
RNO	DFW	52-3-48	J92 PRC J78 OKC J21 DFW.
RNO	MSP	49-7	J7 HIA J16 DPR J32 ABR J70 MSP.
RNO	ORD	52-9	J92 OAL J148 ONL J94 OBK ORD.
RNO	PHX	52-44	J92 PRC J11 PHX.
RNO	STL	52-9-48-15.	J92 OAL J148 J20 DEN J80 MCI J24 STL.
SFO	ABQ	9-52-3	OAK J80 OAL J92 PRC J78 ABQ.
SFO	ATL	9-52-3	OAK J80 OAL J92 PRC J78 TUL J46 J47 MEM J66 RMG ATL.
SFO	BOS	9-11-7	OAK J80 OAL J148 ONL J114 MSP J106 GRB J38 ECK HL547 BUF J16 BOS.
SFO	CLE	9-7A	OAK J80 OAL J148 ONL J94 OBK J584 CRL J34 CLE.
SFO	DEN	9-48	OAK J80 OAL J148 J20 DEN.
SFO	DFW	9-52-3-48	OAK J80 OAL J92 PRC J78 OKC J21 DFW.
SFO	DTW	9-7A	OAK J80 OAL J148 ONL J94 OBK J584 CRL DTW.
SFO	ELP	9-46-3-5	OAK J80 J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J2 ELP.
SFO	EWR	9-7A-1	OAK J80 OAL J148 ONL J94 OBK J584 CRL J34 J146 EWR.
SFO	IAD	9	OAK J80 OAL J148 ONL J94 OBK J89 J30 FRR IAD.
SFO	IAH	9-52-44-5-17.	OAK J80 OAL J92 PRC J11 J2 FST J138 SAT J2 IAH.
SFO	JFK	9-7A-1	OAK J80 OAL J148 ONL J94 OBK J584 CRL J34 J146 JFK.
SFO	MCI	9-48-15	Direct OAK J80 OAL J148 J20 DEN J80 MCI.
SFO	MEM	9-52-3	Direct OAK J80 OAL J92 PRC J78 TUL J46 J41 MEM.
SFO	MIA	9-52-44-5	Direct OAK J80 OAL J92 PRC J11 J2 FST J138 HUB J37 PEKON J86 SRQ J58 BSY MIA.
SFO	MKE	9-78	Direct OAK J80 OAL J148 ONL J94 FOD J132 MCW J16 MKE.
SFO	MSP	49-7	Direct OAK J7 HIA J16 DPR J32 ABR J70 MSP.
SFO	MSY	9-52-44-5-17-17A.	Direct OAK J80 OAL J92 PRC J11 J2 FST J138 SAT J2 MSY.
SFO	OMA	9-ONL-OMA.	Direct OAK J80 OAL J148 ONL OMA.
SFO	ORD	9	Direct OAK J80 OAL J148 ONL J94 OBK ORD.
SFO	PHL	9-7A-1-MIP-Direct.	Direct OAK J80 OAL J148 ONL J94 OBK J584 CRL J34 J146 MIP PHL.
SFO	PHX	9-46-3-5-5A.	Direct OAK J80 J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J18 PHX.
SFO	PIT	9-7A	Direct OAK J80 OAL J148 ONL J94 OBK J584 CRL J34 CLE J518 PIT.
SFO	SAT	9-52-44-5	Direct OAK J80 OAL J92 PRC J11 J2 FST J138 SAT.
SFO	STL	9-48-15	Direct OAK J80 OAL J148 J20 DEN J80 MCI J24 STL.
SFO	TUS	9-46-3-5	Direct OAK J80 J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J2 J11 TUS.
SFO	YYZ	(International).	
SFO	HNL		
SFO	MEX		
SFO	YVR		
SFO	YYC		
SFO	MZT		
SFO	NRT		
SFO	HKG		
SFO	YEG		
SFO	ITO		
SJC	DEN	9-48	Direct OAK J80 OAL J148 J20 DEN.
SJC	DFW	9-52-3-48	Direct OAK J80 OAL J92 PRC J78 OKC J21 DFW.
SJC	ORD	9	Direct OAK J80 OAL J148 ONL J94 OBK ORD.
SJC	PHX	9-46-3-5-5A.	Direct OAK J80 J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J18 PHX.
SJC	HNL	(International).	
SMF	DEN	9-48	Direct LIN J189 J80 OAL J148 J20 DEN.
SMF	ORD	9	Direct LIN J189 J80 OAL J148 ONL J94 OBK ORD.
SMF	PHX	9-46-3-5-5A.	Direct LIN J189 AVE J1 LAX J78 TRM J169 BLH J50 GBN J18 PHX.

Oakland Center LR-II

From—	To—	Coded route	Route
SFO	GEG	49-12A	OAK J7 BOI J577 GEG.
SFO	SEA	45	J1 PDX J189 SEA.
SFO	SLC	9-47	OAK J80 OAL J148 J11 SLC.
OAK	SEA	45	J1 PDX J189 SEA.
OAK	SLC	9-47	J80 OAL J148 J11 SLC.
SMF	SEA	J-95-RBL-45.	J95 RBL J1 PDX J189 SEA.
SMF	SLC	SCK-9	SCK J80 OAL J148 J11 SLC.

[FR Doc. 80-35306 Filed 11-12-80; 8:45 am]

BILLING CODE 4910-13-M